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ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR 1997

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Energy and Water Development Approp...

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BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

HOUSE OF REPRESENTATIVES

ONE HUNDRED FOURTH CONGRESS

SECOND SESSION

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

JOHN T. MYERS, Indiana, *Chairman*

HAROLD ROGERS, Kentucky
JOE KNOLLENBERG, Michigan
FRANK RIGGS, California
RODNEY P. FRELINGHUYSEN, New Jersey
JIM BUNN, Oregon

TOM BEVILL, Alabama
VIC FAZIO, California
JIM CHAPMAN, Texas

NOTE: Under Committee Rules, Mr. Livingston, as Chairman of the Full Committee, and Mr. Obey, as Ranking Minority Member of the Full Committee, are authorized to sit as Members of all Subcommittees.

JAMES D. OGSBURY, BOB SCHMIDT, JEANNE WILSON, and DONALD M. MCKINNON,
Staff Assistants

PART 7

(Pages 1–1281)

TESTIMONY OF MEMBERS OF CONGRESS AND OTHER INTERESTED INDIVIDUALS AND ORGANIZATIONS

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ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR 1997

HEARINGS

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ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR 1997

TESTIMONY OF MEMBERS OF CONGRESS AND OTHER INTERESTED INDIVIDUALS ORGANIZATIONS

TUESDAY, FEBRUARY 27, 1996.

ALABAMA PROJECTS

WITNESS

HON. EARL F. HILLIARD, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ALABAMA

Mr. MYERS. The committee will come to order.

This being the first day of the second session of the 104th Congress, and it is most appropriate, I think, that we start with Alabama in respect to our former Chairman and Ranking Member now.

This will be the last session for Mr. Bevill, Mr. Chapman and myself. We have all decided to go out to pasture. Thirty years Tom and I have been here. I think that is probably long enough we both felt. The country is deserving of something, maybe some new ideas.

Of course, I always liked the old ideas, but nevertheless, we have decided to do something about that, so we want to welcome the Alabama delegation.

Mr. Chairman, if you will handle the hearing today.

Mr. BEVILL. Well, thank you. After 14 months, I have forgotten how to use this.

Thank you, Mr. Chairman, and you know, I always have to make the point that as far as I am concerned this is the most important day in Washington, Alabama day. I started this and I hope it will continue, and I am sure it will. And you all are just a great group to work with.

I appreciate every one of you. And I think back of what we have accomplished in Alabama with your guidance and leadership that you have furnished to these various projects, the Tennessee-Tombigbee, which someone asked me, why is it we don't hear much about it anymore? I said the reason is because it is doing so well. Over 9 million tons, and it is just moving right along.

And, Don, I believe it is over 9 million this past year; wasn't it? You just published a newsletter on that, and I read that, and the thousands of jobs that it has created. And I remember the Corps testified that it figured out about one new job every time one barge loaded, 1,500 ton, and a barge load of coal went down the Tenn-

Tom. Usually, you see about four of them with one tug headed for Mobile to ship overseas, which, of course, is the way we create jobs is by exports and not by imports, as we know.

Then the Coosa Alabama and the Tri-Rivers Project and all these that you all have just made, you have really made them work. And, frankly, we would not be where we are and making the progress with our navigable waterways in Alabama without you people who have volunteered your time and your work and put so much into making Alabama's waterways a very successful means of transportation and, of course, making us competitive in the international market, which is very important, and the deepening of our Mobile harbor.

I just think of all the things that we have accomplished here over these years. As John says, the old system has worked pretty good. So I appreciate every one of you and I hope that, and I know you will, you will continue following through on keeping these projects up-to-date and keeping them in top shape. Thank you for what you have done and having given me the opportunity to work close with you.

So now we will start off with the first one that has arrived. Well, let us see, Earl was the first here, I understand, and here comes number four, Mr. Browder.

I was just saying, Glen, as you come in, the Chair will recognize you. So the Chair will recognize our good friend and colleague, who is great to work with, Earl Hilliard.

And, Earl, you may proceed as you wish.

And we do this with all our delegations over the country, actually, let the Members testify, because each of them have their committees they need to be with and working with. So for that reason we give them priority so they can go ahead and be working for Alabama in other areas.

So, Earl, we will be glad to hear from you.

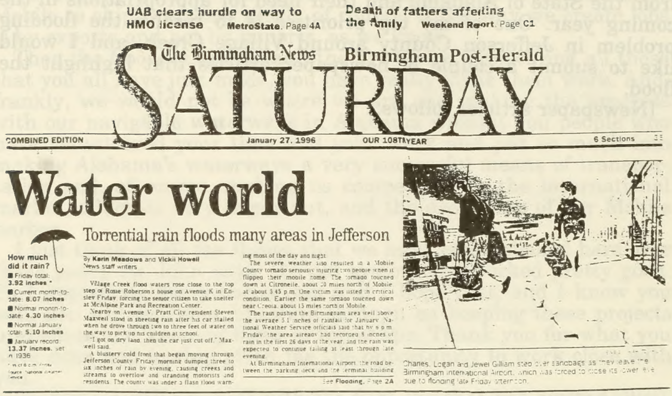
Mr. HILLIARD. Thank you very much, Mr. Chairman, and all of the esteemed Members of this subcommittee.

Let me begin by expressing my sincere admiration and appreciation of you, Mr. Chairman. You have done a tremendous job for the State of Alabama and for this country, and we are very appreciative of all the service you have given here in the House of Representatives. You have always been extremely generous with your time, you have always taken the time to introduce new Members of Congress from the State of Alabama to the workings and the inner-workings of Washington, D.C. and Capitol Hill, and I personally thank you for what you have done for me, helping me find my way around this place and helping me get my legislative agenda through this Congress.

I hate to see you go. In fact, I hate to see all of you go. This committee is really going to miss you and miss your service to this country; and especially you, Mr. Bevill, and your service to the State of Alabama.

Mr. Chairman, today you will hear about several worthy projects from the State of Alabama and their need for appropriations in the coming year. One of my top priorities is to resolve the flooding problem in Jefferson County around Village Creek, and I would like to submit a couple of newspaper articles that highlight the flood.

[Newspaper articles follows:]



UAB clears hurdle on way to HMO license **MetroState**. Page 4A

Death of fathers affecting the family **Weekend Report**. Page C1

The Birmingham News Birmingham Post-Herald

SATURDAY

COMBINED EDITION January 27, 1996 OUR 108TH YEAR 6 Sections

Water world

Torrential rain floods many areas in Jefferson

How much did it rain?

- Friday total: **3.92 inches ***
- Current month-to-date: **8.07 inches**
- Normal month-to-date: **4.30 inches**
- Normal January total: **5.10 inches**
- January record: **13.37 inches**, set in 1936

* as of 6 p.m. Friday

Source: National Weather Service

By **Karin Meadows** and **Vickii Howell**
News staff writers

Village Creek flood waters rose close to the top step of Rosie Roberson's house on Avenue K in Ensley Friday, forcing the senior citizen to take shelter at McAlpine Park and Recreation Center.

Nearby on Avenue V, Pratt City resident Steven Maxwell stood in sheeting rain after his car stalled when he drove through two to three feet of water on the way to pick up his children at school.

"I got on dry land, then the car just cut off," Maxwell said.

A blustery cold front that began moving through Jefferson County Friday morning dumped three to six inches of rain by evening, causing creeks and streams to overflow and stranding motorists and residents. The county was under a flash flood warning most of the day and night.

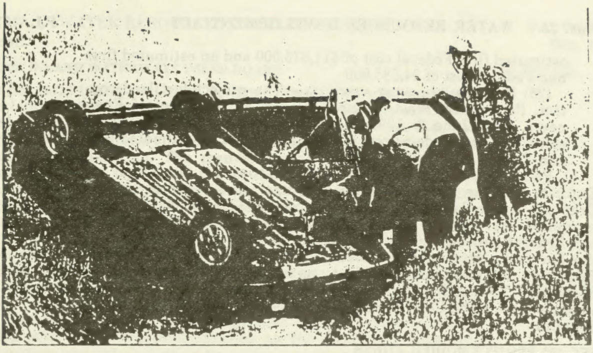
The severe weather also resulted in a Mobile County tornado seriously injuring two people when it flipped their mobile home. The tornado touched down at Citronelle, about 30 miles north of Mobile, at about 3:45 p.m. One victim was listed in critical condition. Earlier the same tornado touched down near Creola, about 15 miles north of Mobile.

The rain pushed the Birmingham area well above the average 5.1 inches of rainfall for January. National Weather Service officials said that by 6 p.m. Friday, the area already had recorded 8 inches of rain in the first 26 days of the year, and the rain was expected to continue falling at least through late evening.

At Birmingham International Airport, the road between the parking deck and the terminal building

See **Flooding**, Page 2A

Charles, Logan and Jewel Gilliam step over sandbags as they leave the Birmingham International Airport, which was forced to close its lower level due to flooding late Friday afternoon.



NEWS STAFF PHOTO MARK ALMOND

Friday's heavy rains caused wrecks and traffic jams throughout Jefferson County, including this two-car crash on Interstate 20-59 Friday afternoon that resulted in at least one injury.

Flooding

From Page **1A**

flooded and passengers arrived, departed and picked up baggage on the upper level. No flights were canceled or delayed because of the weather, airport officials said.

The water wasn't as high as in October, when Hurricane Opal's heavy rains meant ankle-deep flooding in the terminal building, but airport officials had placed sandbags on the sidewalks in front of the ground-level entrances. At one point the water had crept over the sidewalk and was about five feet away from the doors.

"The water has come back up. It is raining hard," Birmingham Airport Authority Spokeswoman Carol Windham said at about 6 p.m. Friday. "It is a temporary situation ... but as long as it rains hard this evening it will stay that way."

Ms. Windham said Birmingham city officials and the airport authority are working to alleviate the airport flooding. The city already has begun clearing out trees and brush near Village Creek, she said.

Flooding was reported throughout Jefferson County in areas north to Morris, east to Trussville and west to Bessemer.

Low areas near Village Creek were the hardest hit.

On Avenue V between 11th and 13th Streets in the Ensley-Pratt City area, cars crept through two to three feet of water, driving past a completely flooded field and houses where water was almost lapping over back decks.

Eighteen-wheelers made the drive through flooded areas worse, causing waves that splashed water almost up to the windows of four-wheel-drive utility vehicles.

Birmingham Fire and Rescue Service workers in boats rescued five people stranded in a house on 12th Street, Fire Chief Jim Henson said. Boats were dispatched to flooded Shuttlesworth Drive at 27th Street North, he said.

"People need help getting out of their houses," Henson said. "We are assisting them in evacuating."

The rains didn't stop many from driving flooded roads like Avenue W — where the water was four to five feet deep. Birmingham police attempting to keep drivers from traveling the treacherous streets had to wait up to four hours for barricades.

"I'd heard them (police) say they'd ordered them (barricades) but hadn't gotten them yet," Birmingham police Capt. Hollis Crutchfield said, about barricades ordered for the Pratt City area at 1:30 p.m., but still not delivered by 6 p.m. "If we could get the public not to drive through the water it would help."

Susan Pickett, public relations administrator for the Birmingham Area chapter of the American Red Cross, said one shelter was opened Friday at McAlpine Park and Recreation Center at 1115 Ave. F, Ensley.

Three other sites — Ensley Park and Recreation Center, Martin Luther King Jr. Park and Recreation Center and Bessemer City Hall — were on standby, Ms. Pickett said.

The McAlpine shelter had two visitors at about 5 p.m., including Ms. Roberson. Both of the Pratt City residents had made arrangements to stay with family members until the water receded.

Area roads closed by flooding

These Birmingham and Jefferson County streets and intersections were closed during Friday's flooding and may remain unsafe this morning.

Birmingham

- Avenues V through M at 12th Street, Pratt City.
- Valley Creek at Country Circle.
- Dennison Avenue at Dennison Circle.
- 1500 block of Dennison Avenue.
- Bessemer Road at Lomb Avenue.
- Airport Highway between 31st and 33rd streets north.
- 27th Street at Fifth Avenue North.
- 1100 block of Five Mile Road.
- Shuttlesworth Drive at 29th Street North.
- 100 block of 16th Avenue West.
- 2800 block of 22nd Avenue North.
- Tallapoosa Street at Interstate 59.
- 19th Street at Avenue O, Ensley.
- Erie Street from 16th Street to the bridge in Wylam.
- 900 and 1000 blocks of Avenue F, Ensley.
- 8600 block of First Court North.

Jefferson County

- Lakeland Trail at Queenstown Road, Trussville.
- Bradford Trafford Road at Hughes Station.
- Shady Grove Road, Mount Olive.
- Cherry Avenue at Blossburg Road, Forestdale.
- New Castle Road at Cunningham Creek.
- Crosston Road at Morris Majestic Road.
- Jaybird Road to 18th Street in Bessemer's Pipe Shop community and Highland Cemetery area.

estimated first Federal cost of $11,675,000 and an estimated first non-Federal cost of $4,585,000.

(26) Petersburg, West Virginia.—The project for flood control, Petersburg, West Virginia: Report of the Chief of Engineers, dated June 29, 1990, at a total cost of $17,904,000, with an estimated first Federal cost of $10,044,000 and an estimated first non-Federal cost of $7,860,000.

(b) Project Subject to Favorable Report of the Chief of Engineers.—The project for flood control, Los Angeles County Drainage Area, California, at a total cost of $327,000,000, with an estimated first Federal cost of $163,500,000 and an estimated first non-Federal cost of $163,500,000, is authorized to be prosecuted by the Secretary in accordance with a final report of the Chief of Engineers and with such modifications as are recommended by the Secretary. No construction on the project may be initiated until such a report of the Chief of Engineers is issued and approved by the Secretary.

SEC. 102. PROJECT MODIFICATIONS.

(a) Village Creek, Alabama.—The project for flood control, Village Creek, Alabama, authorized by section 401 of the Water Resources Development Act of 1986 (100 Stat. 4111), is modified to authorize the Secretary to acquire private vacant lands within the definite project boundaries established in the Real Estate Design Memorandum, dated March 4, 1988, as a nonstructural element of the project.

(b) Kodiak Harbor, Alaska.—The project for navigation, Kodiak Harbor, Alaska, authorized by section 202(a) of the Water Resources Development Act of 1986 (100 Stat. 4091), is modified to authorize the Secretary to construct the project at a total cost of $25,000,000, with an estimated first Federal cost of $22,500,000 and an estimated first non-Federal cost of $2,500,000.

(c) Los Angeles and Long Beach Harbors, San Pedro Bay, California.—Section 4(d) of the Water Resources Development Act of 1988 (102 Stat. 4015) is amended by inserting after "approved by the Secretary" in the first sentence the following: "or which is carried out after approval of the final report by the Secretary and which is determined by the Secretary to be compatible with the project".

(d) Sacramento Deep Water Ship Channel, California.—The project for navigation, Sacramento Deep Water Ship Channel, California, authorized by section 202(a) of the Water Resources Development Act of 1986 (100 Stat. 4092), is modified to direct the Secretary, if requested by a non-Federal sponsor, to enforce, on a reimbursable basis, the terms of any permit issued by the Secretary under section 10 of the Act of March 3, 1899 (30 Stat. 1151; 33 U.S.C. 403), commonly known as the Rivers and Harbors Appropriations Act of 1899, to compel the relocation of any utility necessitated by the construction of such project.

(e) Santa Ana Mainstem, California.—The project for flood control, Santa Ana Mainstem, including Santiago Creek, California, authorized by section 401(a) of the Water Resources Development Act of 1986 (100 Stat. 4113), is modified to authorize the Secretary to develop recreational trails and facilities on lands between Seven Oaks Dam and Prado Dam, including flood plain management areas.

SEC. 302. INLAND WATERWAYS USERS BOARD.

33 USC 2251.

(a) ESTABLISHMENT OF USERS BOARD.—There is hereby established an Inland Waterway Users Board (hereinafter in this section referred to as the "Users Board") composed of the eleven members selected by the Secretary, one of whom shall be designated by the Secretary as Chairman. The members shall be selected so as to represent various regions of the country and a spectrum of the primary users and shippers utilizing the inland and intracoastal waterways for commercial purposes. Due consideration shall be given to assure a balance among the members based on the ton-mile shipments of the various categories of commodities shipped on inland waterways. The Secretary of the Army shall designate, and the Secretaries of Agriculture, Transportation, and Commerce may each designate, a representative to act as an observer of the Users Board.

(b) DUTIES.—The Users Board shall meet at least semi-annually to develop and make recommendations to the Secretary regarding construction and rehabilitation priorities and spending levels on the commercial navigational features and components of the inland waterways and inland harbors of the United States for the following fiscal years. Any advice or recommendation made by the Users Board to the Secretary shall reflect the independent judgment of the Users Board. The Users Board shall, by December 31, 1987, and annually thereafter file such recommendations with the Secretary and with the Congress.

(c) ADMINISTRATION.—The Users Board shall be subject to the Federal Advisory Committee Act (83 Stat. 770; 5 U.S.C. App.), other than section 14, and, with the consent of the appropriate agency head, the Users Board may use the facilities and services of any Federal agency. Non-Federal members of the Users Board while engaged in the performance of their duties away from their homes or regular places of business, may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5703 of title 5, United States Code.

TITLE IV—FLOOD CONTROL

SEC. 401. AUTHORIZATION OF PROJECTS.

Studies.
Reports.

(a) AUTHORIZATION OF CONSTRUCTION.—The following works of improvement for the control of destructive floodwaters are adopted and authorized to be prosecuted by the Secretary substantially in accordance with the plans and subject to the conditions recommended in the respective reports designated in this subsection, except as otherwise provided in this subsection:

VILLAGE CREEK, ALABAMA

The project for flood control, Village Creek, Jefferson County, Alabama: Report of the Chief of Engineers, dated December 23, 1982, at a total cost of $31,600,000, with an estimated first Federal cost of $23,600,000 and an estimated first non-Federal cost of $8,000,000.

THREEMILE CREEK, ALABAMA

The project for flood control, Threemile Creek, Mobile, Alabama: Report of the Chief of Engineers, dated April 20, 1984, at a total cost

The Birmingham News
METROSTATE
Sunday, January 28, 1996

TODAY
Last of four trials in murder, mutilation set to begin Monday/14A
WEATHER 16A
Cahaba River Society to show businesses value of river/22A

Damage seen clearly now the rain is gone

John Archibald
staff writer

> “It was a flood, a river running right past the front doors of the airport. You had to see it — the parking deck was awash with water.”
>
> *Katheryn Strausi, who waited for hours at the Birmingham Airport Friday as her daughter and grandson attempted to fly to New York*

Dawn broke like a rainbow Saturday, its clear blue skies signaling an end to the miserable Friday that brought record rainfall to the Birmingham area, flooded dozens of homes and streets and turned Alabama highways into danger zones.

Though water levels on the Cahaba, Black Warrior and some other rivers continued to rise Saturday, the National Weather Service canceled flood warnings for Village Creek and evacuees returned home to a mess.

Mud caked the ground like snow all in the neighborhood around Eugene Stinson's home at [illegible] 19th Avenue [illegible] in Ensley. In a much practiced routine, Stinson came home Saturday, grabbed his garden hose and washed the muck from his home and yard.

"I've lived here [illegible] years and every time it rains, it floods," he said. "It's a hard time."

The [illegible] front that [illegible] through Alabama on Friday [illegible] record of almost five inches of rain on the Birmingham area, according to the National Weather Service. Amounts ranging from two to four inches fell across the state.

Several residents in the flooded area from 19th Street Ensley to First Street Pratt City sought shelter at the McAlpine Park and Recreation Center Friday night, and countless others stayed with friends and relatives, Stinson said.

Ensley Neighborhood Association Vice President John Meenan assessed the damage Saturday morning.

"There's a lot of water damage," he said. "Rugs and mattresses and floors and appliances are damaged. A lot of people are doing a lot of cleanup."

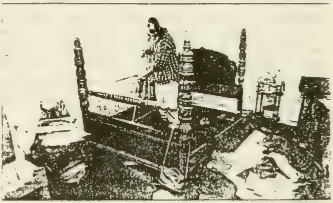
Meenan said he has been trying to reach U.S. Congressman Earl Hilliard and is trying to have the neighborhood declared a federal disaster area.

In addition to flooding in the Ensley and Pratt City areas, minor flooding occurred at the Birmingham International Airport and some areas south of Birmingham.

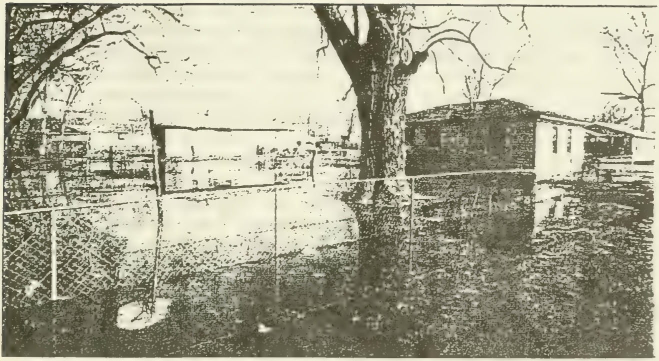
And the torrential rains wreaked havoc on Alabama highways. The old U.S. 31 south of Birmingham, for example, ended up with cracks following the rain.

The rains also caused wrecks. A spokeswoman for the Alabama State Trooper office in Birmingham said the office worked 35 wrecks in [illegible]

See Damage, Page 16A



Eddie Burrell spent Saturday mopping his bedroom after Friday's rain flooded into his Pratt City home.



NEWS STAFF PHOTO/BERNARD TRONCALE

This chain link fence wasn't enough to hold back Village Creek, which rose above its banks because of Friday's storm.

Damage

From Page **13A**

highways Friday.

"That's a lot for us," she said. "A normal day we'll work less than 10."

There were no fatalities, and most of the wrecks were minor, she said.

The driving problems continued Saturday morning — particularly in St. Clair County — as sub-freezing temperatures turned standing water to ice, she said. Again there were no reported fatalities.

Although there were no apparent weather-related injuries in Birmingham, two people were hurt in north Mobile County on Friday when a tornado struck their mobile home.

The mobile home flipped while they were inside. Clara Pratt, 85, was listed in serious condition Saturday at University of South Alabama Medical Center. Clemie Frederick, 72, was treated and released, the Associated Press reported.

In the Birmingham area, problems were limited to fender benders, water damage and inconvenience.

Katheryn Scalisi waited for hours at the Birmingham Airport Friday as her daughter and grandson attempted to fly to New York. The two boarded the plane at 2:15 p.m., but did not take flight until 4:20, she said.

In the meantime, airport workers sand-bagged lobby entrances and told those parked on the first floor of the parking deck to move their cars.

"It was a flood, a river running right past the front doors of the airport," she said. "You had to see it — the parking deck was awash with water."

No water made it into the airport terminal, she said.

The Birmingham Area Chapter of the American Red Cross on Saturday began damage assessment operations in flooded areas of Ensley, Bessemer, Shelby County, Palmerdale and Tarrant. The Red Cross later will open assistance centers where volunteers will help people affected by the flooding.

The section of the Cahaba Rive that runs near Cahaba Heights wa expected to crest five feet above th flood stage early this morning, th National Weather Service said. Th river was to crest at 19 feet, posing threat to commercial property i the area. The flood stage of the rive is 14 feet, but property does not floo until 18 feet, the weather service said.

The cold front responsible for the rains swept across Alabama and ou the southeast corner of the state about daybreak Saturday. Behind the front, skies quickly cleared as colder and drier air poured in.

Today's weather is to be sunny and slightly warmer, with highs in the mid 50s.

"We need some sun," Ensley's James Stewart said as he raked away debris. "We need some sun and some heat."

Mr. HILLIARD. I don't know whether all of you are aware of this, but I am sure Mr. Bevill is. In January we had a tremendous flood and hundreds of commercial and residential properties were flooded. Most importantly our international airport was flooded. I had an extremely difficult time getting home. In fact, I could not go directly home. I had to wait in Atlanta for a couple of days in order for airplanes to begin landing again in Birmingham. I am sure this committee is familiar with the problem because in the past you have directed the Corps of Engineers to address the matter.

I have again called on the Mobile office to assist us. However, it is my understanding that the Corps of Engineers' authorization may expire at the end of this fiscal year. Last month's flooding demonstrates that more work and maintenance is needed; and, therefore, I am requesting additional assistance from this subcommittee.

I would be very happy if you would give expeditious consideration because we have had some tremendous problems. This is the third time we were flooded this year. I don't know whether it is because of the change in atmospheric pressure or whether it is because of the ozone levels, but I do know it is a problem that we do need to address.

I have already introduced some testimony, Mr. Chairman, and I would like for it to be made a part of the record. Just briefly, there are several other projects I would like to mention. The Town of Moundville needs two extensions to its sewer system. The Hale County Water Authority needs to extend its water service to include a couple hundred poor rural residents. Greene County needs to replace two very old sewer lines. All these counties are on the banks of the Alabama River and it is very important we fix these sewer problems so that we will be able to maintain the ecological balance and control the pollution problem in that area.

Once again this year I am requesting additional funding for the Naheola Bridge. I don't know how many of you know about this bridge, but every time I have been before this committee I have talked about it. It is one of two bridges, I believe, in the State of Alabama, and one of five bridges in the southern part of the United States that has a traffic light on it. It serves simultaneously as a railroad crossing bridge, as a pedestrian bridge, and as a bridge for automobiles.

It is not a steel bridge, as you would think, it is built out of cross ties and it is very old. You cannot see across it. And most importantly it is a one-way bridge. So if you are approaching the bridge in your car and another car is coming, you are going to have to back up, and believe me, it is difficult, especially if a train is on the bridge. So any help that you give in this area it would surely be appreciated.

Today you will hear testimony from the Warrior-Tombigbee Development Association regarding its request for operation and maintenance funds and additional capacity funds. And I would be happy if you would pay attention to them and do whatever you can in the coming months.

Mr. Chairman, once again I would like to extend to you my congratulations for your 30-plus years of service to the State of Alabama and to the United States Congress, and I am going to personally miss you. I hate to see you go, and all of Alabama will miss you.

Thank you very much for giving me the opportunity to come and appear once again before your committee, and I would like to thank each Member of the committee.

Thank you very much.

[The statement of Mr. Hilliard follows:]

EARL F. HILLIARD
7TH DISTRICT, ALABAMA

COMMITTEE ON AGRICULTURE

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AND FOREIGN AGRICULTURE

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Testimony of Congressman Earl F. Hilliard
House Subcommittee on Energy and Water Appropriations
Tuesday, February 27, 1996

Thank you, Mr. Chairman and all of the esteemed Members of this Subcommittee. Let me begin by expressing my sincere admiration and appreciation of Congressman Bevill for all he has done for the State of Alabama during his tenure on this Subcommittee, and throughout his service in the House of Representatives.

Mr. Bevill, you have always been extremely generous with your time and resources to assist the residents of the state of Alabama. By hearing the testimony of our delegation today, you provide a tremendous service to all of our constituencies, and we are eternally grateful.

Mr. Chairman, today you will be hearing about several worthy projects from all over Alabama, and I know you will give these undertakings every consideration as you formulate the FY'97 Appropriations Bill.

One of my top priorities is to resolve the flooding problem in Jefferson County around Village Creek. The January flood caused significant damage to several commercial and residential properties, including the Birmingham International Airport. I am submitting for the record two newspaper articles highlighting the flooding.

I know that this Subcommittee is aware of the flooding problem, and in the past you have directed the Corps of Engineers to address the matter. I have again called on the Mobile office of the Corps for

aid in this matter. However, it is my understanding that the Corps' authorization may expire at the end of the fiscal year. Last month's flooding demonstrates that more work and maintenance is needed. Therefore, I am requesting additional assistance from the Subcommittee regarding this important matter.

Also, I have contacted the Transportation and Infrastructure Committee, and submitted a Survey Resolution that would give the Corps the additional authority for any necessary action. I am submitting a copy of the Survey Resolution that I provided to Chairman Boehlert of the Water Resources and Environment Subcommittee.

In my district, there are several worthy projects that I would like to bring to your attention. The Town of Moundville needs two extensions to its sewer system, and the Hale County Water Authority needs to extend its water service to include approximately 120 poor, rural residents. In addition, Greene County needs to replace two very old sewer lines in order to correct infiltration and inflow.

Additionally, I would like to request funding for a dilapidated bridge -- the Naheola Bridge --which connects two counties in my district, Marengo and Choctaw. This bridge is dangerous and I am sure in substandard condition. At present, it serves as a pedestrian, vehicle and railroad bridge. It also serves one of my district's largest industries, the James River Corporation.

Today you will hear testimony from the Warrior-Tombigbee Development Association regarding its request for both Operations and Maintenance funds, and Additional Capability funds. The current request encompasses an allocation for a mooring cell in Demopolis.

Since the usual funding guidelines are not available at this time, the Association has developed its own budget. The requested amount will adequately fund the day-to-day operations, and support the continuing projects they oversee, as well as the much-needed projects they hope to initiate. I am certain that their figures are based on accurate projections and will be in-line with official budget guideline figures when these guidelines are released.

The other Alabama River Development Associations are well represented here today. In the past, your assistance to the association has been invaluable, and I know this subcommittee will give their concerns close attention.

Again, I appreciate the opportunity to appear before this Subcommittee today. Mr. Bevill, it has been an honor to serve with you. I know I speak for this delegation and all Alabamians when I say that your presence will be deeply missed.

Mr. BEVILL. Thank you.

Thank you, Earl.

Actually, no one has been more supportive than you of our waterways, inland waterways system, and I think we definitely ought to look at that bridge. I am impressed with your testimony about that bridge.

Mr. MYERS. I suggest you look at it from the air, though.

Mr. BEVILL. So I hope we can be of some help to you on that.

TUESDAY, FEBRUARY 27, 1996.

ALABAMA PROJECTS

WITNESS

ROBERT E. CRAMER, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ALABAMA

Mr. BEVILL. Next is our good friend and colleague, Bud Cramer. Bud is always in there pitching and a great help to our State of Alabama. So, Bud, we will be glad to hear from you.

Mr. CRAMER. Mr. Chairman, thank you.

And to both Chairmen, if you don't mind me referring to you that way, I want to also pay tribute to you. In my six brief years of being here, I have been a constant ally of both of yours because I have been so impressed with your ability to run a committee like this, that has so much impact in my congressional district, in my State, but in the country as well.

As my colleague from just below me, I have the top of Alabama and Tom Bevill has the rest of north Alabama, so to speak, and he certainly has been so well-known in my district that they speak of him first. And they know I try to work with him as best I can, so we will miss you, Mr. Chairman.

In this room today we have——

Mr. BEVILL. Mr. Chairman, actually, Bud and I have all of north Alabama. And for your information, you may appreciate this, some of our good friends here from south Alabama, they refer to us as Yankees.

Mr. CRAMER. We talk about the activities in L.A., Mr. Chairman. We mean lower Alabama when we say that.

Mr. MYERS. I thought Yankees was hyphenated, too.

Mr. CRAMER. We have in this room today representatives of the Alabama River Development Association, the Warrior-Tombigbee Development Association, the Coosa Alabama River Improvement Association and the Tennessee River Valley Association. As you know, these organizations have been proactively involved in economic development in our State, and I would like to renew my support for their outstanding work.

Your committee has taken up a number of often contentious issues. In the audience today are representatives of the Tennessee Valley Authority, TVA has been so important to our area of the country, been such a positive impact that I have often said they have made us the economic development shining light that we are there in north Alabama.

We know that the TVA administration must work harder to make the agency more efficient, more accountable, but they have responded to your inquiries and your scrutiny as well.

I would like to thank this committee for its support of the Environmental Research Center, ERC. It is a unique world-class facility for preventing environmental pollution. It is just getting up and going, as Mr. Bevill knows from a recent visit down there. It houses a state-of-the-art project for reducing pollution through use of constructed wetlands. So it is not just a TVA facility, it is a world-class environmental research facility. We need to continue our support for that facility as well.

We have talked an awful lot about the Appalachian Regional Commission. In my area of the country ARC has shined as a model for how Federal and State Government can work together for the common good of the people. We have cut back on funding for ARC, we have revamped it, we have made it currently more relevant to today's budget realities, but I think it is deserving of our continued support, as well as for the Army Corps of Engineers Section 205 flooding prevention efforts.

There in Muscle Shoals we have done a lot of preliminary work with flooding problems there and we believe we are ready to make that next step for them as well as projects in Decatur, as well as projects in Huntsville, Ditto Landing, near Huntsville, has well been the beneficiary there.

So we are often pleading with you to consider projects in our area of the State. You have listened to our pleas and we want to thank you for that.

Thank you for allowing me to be here today. I have a statement for the record as well.

[The statement of Mr. Cramer follows:]

Statement of the Honorable Robert E. "Bud" Cramer, Jr., of Alabama
before the Subcommittee on Energy and Water Development
Committee on Appropriations
"Alabama Day"
February 27, 1996

Mr. Chairman, Mr. Bevill, on behalf of the people of the Fifth Congressional District of Alabama, I would like to thank you both for your past support of our local projects and interests. I appreciate your hosting "Alabama Day" once again so we may discuss local concerns that come under the jurisdiction of your subcommittee.

One of my chief concerns is the Tennessee Valley Authority (TVA), which employs 4000 people in my district. Over the last sixty years, TVA has helped build our area into the productive, successful district we are today. I support the work TVA performs in North Alabama. At the same time, I believe the TVA administration must be more aggressive than ever before in making the agency more efficient and accountable. The American people today want federal agencies to be less bureaucratic and more productive. I want TVA to be more responsive to the present-day needs of Alabama as well.

One TVA program that I believe deserves continued support is the Environmental Research Center (ERC) in Muscle Shoals, Ala. The center is a unique, world-class facility devoted to preventing environmental pollution. ERC houses a state-of-the-art project for reducing pollution through the use of constructed wetlands. The center develops technology to convert waste into environmentally-safe fuel and chemical products. It conducts environmental management programs for cleanup of contaminated materials and hazardous waste.

As you know, last year's funding for this invaluable center took a 50% reduction from $34 million to $17 million. TVA has streamlined ERC considerably over the last ten years to make it a better, leaner operation. For its important environmental work performed at a reasonable cost, the Environmental Research Center should continue to serve our nation. Therefore, I strongly urge the committee to appropriate a minimum of $17 million for ERC in fiscal year 1997.

Another important federal program is the Appalachian Regional Commission (ARC). ARC has been crucial in the development of our rural communities. It has made the difference in providing our people with vital services like water lines, sewer systems, medical help, and telephone service. Many Americans who would not have these basic services without ARC. The commission shines as a model for how federal and state government can work together for the common good of the people.

I would like to thank the members of the subcommittee for your past help in providing for the Army Corps of Engineers' section 205 flooding prevention efforts in Muscle Shoals. Flood waters have devastated the area for many years. We believe the reconnaissance study, planning and design which have been done will be tremendously helpful in solving the problem. Construction must now be completed, however, to ensure the vast resources invested in this project are not wasted. Even more importantly, the people of Muscle Shoals must be protected from further mass flooding damage.

The Corps of Engineers has been very efficient in keeping Muscle Shoals Mayor Charlie Mitchell and me informed of the study's progress. Given the severity of the problem and the amount already invested in this valuable effort, I sincerely hope the subcommittee will be able to continue its support.

I would also like to thank the subcommittee for its support of the section 205 Dallas Branch/Pinhook Creek and Decatur Section Flood Control efforts. I hope the subcommittee will continue in this vein by providing the Dallas Branch project a much-needed feasibility study and funding the design and construction of the Decatur Section

The subcommittee was instrumental in the Corps of Engineers reconnaissance study for the Hunstville Spring Branch which was completed in 1995. The Corps must now begin planning and specifications. If nothing is done to rectify the situation, the branch's flood-induced debris problem promises to worsen dramatically over time. Tremendous consensus and commitment has been garnered between the city of Huntsville, Redstone Arsenal and Wheeler National Wildlife Refuge. I urge the subcommittee to continue assisting these entities in their efforts.

Ditto Landing near Huntsville requires inclusion under section 14 Streambank Protection. I hope the subcommittee will fund the design and construction measures needed to complete this erosion control project. In addition, I request the subcommittee support of a proposed sewer system for Stevenson, providing a vital service to the people of rural Jackson County.

Finally, I would like to take the opportunity today to express my support for the Alabama River Development Associations - the Warrior-Tombigbee Development Association, the Coosa-Alabama River Improvement Association, and the Tennessee River Valley Association. These three organizations are responsible for a tremendous amount of economic development in our state, and I am pleased to renew my support for their outstanding work.

Mr. Chairman, Mr. Bevill, thank you both again for your gracious hospitality and your genuine concern for our needs and interests.

Mr. BEVILL. Very good.

Each of your prepared statements will be made, without objection, will be made a part of the record.

And we appreciate you, Bud.

I might mention that Bud is, for the benefit of you from Alabama here today, he is a Member of the Public Works Authorization Committee and has been most helpful because he has been in a position to help us with the appropriations here, since the authorizations have to come first, and then we can make an appropriation or not make one, and, if so, decide how much.

But the authorization has to come first. The authorization legislation. And he has been very helpful in working with us on that.

Thank you, Bud.

TUESDAY, FEBRUARY 27, 1996.

ALABAMA PROJECTS

WITNESS

HON. TERRY EVERETT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ALABAMA

Mr. BEVILL. Next, we have our good friend and colleague here, Congressman Terry Everett, and we will be glad to hear from you, Terry. You have been very supportive of this committee and we appreciate your good work.

Mr. EVERETT. Thank you.

And thank you, Mr. Chairman and Mr. Chairman, for allowing me to testify here today.

I just want to add a word or two to what my colleagues have already said. I am going to personally miss you and, frankly, I would just as soon you didn't retire, but I would have to point out that present and future generations of Alabamians will always be indebted for the service you have given to our State.

And someone referred to L.A., and that does mean lower Alabama. It does not mean Los Angeles. I don't know where that got started. I even have projects in my district in L.A. named Tom Bevill. We are glad to have that.

I appreciate the opportunity to testify here today.

First, I would like to welcome the Coosa-Alabama River Improvement Association, Tri-Rivers Waterway Development Association, and the Warrior-Tombigbee Development Association, who are all present today to make the committee aware of their priorities.

Mr. Chairman, as I sit before you today representing the Second Congressional District of Alabama, I speak for a number of groups and private citizens directly involved in our State's waterway projects. As my friends will tell you today, we recommend that funding priorities within your subcommittee be focused on maintaining the operations and maintenance of the Coosa-Alabama River System and the Apalachicola-Chattahoochee-Flint Inland Waterway River System at the fiscal year 1996 levels. This will help the continued rehabilitation of existing facilities, maintenance, dredging, and modification of training dikes.

Secondly, the reliability of the Alabama River as a means of transportation has been a consistent deterrent to economic growth in the Montgomery area, as well as others. While the entire Alabama River presents navigational challenges, the major problems occur below the Claiborne Dam. We believe the most effective solution to enhancing navigation is a fourth lock and dam. The Corps of Engineers is currently conducting a study of this option. I strongly support it and urge the funding be available for a follow-on feasibility study if necessary.

Another issue of importance is the shoaling problems that have occurred because of extensive flooding caused by tropical storm Alberto and then compounded by hurricane Opal. These natural disasters have caused significant changes in the shoaling patterns on the Chattahoochee and Flint Rivers and have necessitated additional dredging. Because of this the Corps of Engineers has been prevented from meeting their scheduled dredging projects elsewhere on the Tri-Rivers system. I strongly believe funding must be allocated to help this situation.

Another concern that has been brought to my attention is the exorbitant demand currently being made on the groundwater aquifers and the surface water supplies in southeast Alabama. Recently, the Chattahoochee—excuse me, we have the Choctawhatchee and Chattahoochee. The Choctawhatchee-Pea Rivers Watershed Management Authority, which represents 10 counties in my district, cosponsored a study with the State of Alabama, that identified this problem, along with several others. Most pressing of these was the reliance and extensive usage of the Narafalia aquifer in the southern portion of the watershed, which includes Dothan, a major population center in my congressional district.

At the current rate, Dothan is expected to deplete a majority of its groundwater reserves near the year 2040. In order to complete this analysis, the watershed authority will need approximately $250,000 in additional funding. I understand their request will be forthcoming and hope you will give the request your full consideration.

Mr. Chairman, let me also just briefly touch on the ongoing study of the Alabama-Coosa-Tallapoosa and the Apalachicola-Chattahoochee-Flint River Basins. I fully support the objective of this study and hope that a resolution can be found as soon as possible that will be fair to all parties concerned.

Again, Mr. Chairman, let me thank you, Mr. Bevill, all of the State of Alabama and myself personally will be indebted to you. Also I want to thank the rest of the Members of the committee for hearing me today and I will have a more complete statement submitted for the record.

[The statement of Mr. Everett follows:]

TESTIMONY OF CONGRESSMAN TERRY EVERETT BEFORE THE

HOUSE ENERGY AND WATER DEVELOPMENT APPROPRIATIONS SUBCOMMITTEE

FY 97 BUDGET REQUEST

FEBRUARY 27, 1996

Chairman Myers, I appreciate having the opportunity to testify before your subcommittee today on the subject of FY 97 funding levels for the Corps of Engineers' water resource projects in Alabama. This is an unusual process in that we do not have the benefit of the Administration's budget request yet.

The Coosa-Alabama River Improvement Association, the Tri-Rivers Waterway Development Association, and the Warrior-Tombigbee Development Association are all present today to make the committee aware of their priorities for FY 97. While there are a number of issues important to these groups before you today, I would like to briefly focus my comments on several matters.

Mr. Chairman, as I sit before you today representing the second congressional district of Alabama, I speak for a broad base of diverse groups and private citizens directly involved in our state's waterway projects. While I understand and support the ongoing efforts of this Congress to reduce wasteful government spending and eliminate deficit spending, I strongly advocate the continuation of projects that encourage economic growth. These not only benefit our state, but also the country as a whole. Thanks to the substantial investment by the federal government in these projects, billions of dollars have been invested by industry in this region, which has provided thousands of jobs.

As my friends will tell you today, we recommend that funding priorities within your subcommittee be focused on maintaining the operations and maintenance for the Coosa-Alabama River System and the Apalachicola-Chattahoochee-Flint Inland Waterway and River System at the FY 96 levels. This will help the continued rehabilitation of existing facilities, maintenance dredging, and modification of training dikes.

Secondly, the reliability of the Alabama River as a means of transportation has been a consistent deterrent to economic growth in the Montgomery area, as well as others. While the entire Alabama River presents navigation challenges, the major problems occur below the Claiborne Dam. We believe the most effective solution to enhancing navigation is a fourth lock and dam. The Corps of Engineers is currently conducting an exploratory study of this option. I strongly support this study and urge that funding be available for a Follow-On Feasibility study if necessary.

Another issue of importance is the shoaling problems that have occurred because of the extensive flooding caused by tropical storm Alberto and then compounded by Hurricane Opal. These natural disasters have caused significant changes in the shoaling patterns on the Chattahoochee and Flint rivers which have necessitated additional dredging. Because of this, the Corps of Engineers has been prevented from meeting their scheduled dredge projects elsewhere on the Tri-Rivers system. Limited funding has forced the Corps of Engineers to defer dredge projects creating further navigation problems for users of the Tri-Rivers system. Because of the dredging problems on the Tri-Rivers system, commercial traffic has been significantly hindered and many opportunities have been missed. I strongly believe funding must be allocated for mitigating this problem.

Another concern that has been brought to my attention is the exorbitant demand that is currently being placed on the ground water aquifers and the surface-water supplies in southeast Alabama. Recently, the Choctawhatchee-Pea Rivers Watershed Management Authority, which represents ten counties in my district, cosponsored a study with the Geological Survey of Alabama that identified this problem. Now, a year into this study, several issues have been identified as requiring immediate action. Most pressing of these are the reliance and excessive usage of a specific aquifer in the southern portion of the watershed which includes Dothan, a major population center in my congressional district. At the current rate, Dothan is expected to deplete a majority of its groundwater reserves near the year 2040.

In order to complete this analysis, the watershed authority will need additional funding, estimated at $250,000. I understand that their request will be forthcoming and hope you will give it your full consideration.

Mr. Chairman, let me also just briefly touch on the ongoing study of the Alabama-Coosa-Tallapoosa and the Apalachicola-Chattahoochee-Flint River Basins. This study is working to identify a mechanism by which the Governors of Alabama, Georgia, and Florida and the Corps of Engineers can coordinate a reasonable distribution of the water supply of the two basins. I fully support the objective of this study, and hope that a resolution can be reached soon that is fair to all parties

Mr. Chairman, let me thank you, Mr. Bevill, and all Members of the subcommittee for allowing me the opportunity to share my support for Alabama's waterway projects. While doing that, let me mention that these projects benefit the State of Alabama, but they equally benefit the entire nation. As we continue to call on our nation's waterways, I call on you to carefully consider the opinions presented here today.

Thank you Mr. Chairman.

Mr. BEVILL. Thank you, very much, Terry. You have been great to work with and you have been very supportive of all these Alabama projects.

As a matter of fact, it just occurred to me, the entire House delegation of Alabama is in this room now. And I just want to say, Mr. Chairman, we like to brag about this because, as you know, it is not always the case up here, we Republicans and Democrats work together mighty close from Alabama.

When there is a problem in Alabama, all of us get behind it and we work with one another, in whoever's district. Like Glen Browder there, with some of the challenges he has had in his district. We all just join in and support him and help him, and we forget about the partisan politics.

As a matter of fact, the Chairman and I have pretty well done that ourselves here. We are probably the most nonpartisan appropriations panel in the Congress, I think it would be safe in saying that. We all just work together to get the job done.

As a matter of fact, this panel always has either the first or the second appropriation bill out of the 13. We have been hearing about all these extensions and continuing resolutions and all that. Well, the Chairman and I have, we have sat back and observed this because ours was signed before October the 1st.

So we sit back and sympathize with the other Chairmen of the appropriations panels because they are having to continue to operate their part of the government, in so many cases, having to operate with Continuing Resolutions for 2 and 3 weeks, and so forth. So we sympathize and feel sorry for what they are having to go through but glad we don't have to go through that because we have our work done.

Mr. MYERS. If you will yield?

Alabama has always been this way, the years we have been here. But have you ever thought about doing missionary work here in Congress?

Mr. BEVILL. Well, you know, I am looking for a new job.

Mr. MYERS. That would be a job; a task.

TUESDAY, FEBRUARY 27, 1996.

ALABAMA PROJECTS

WITNESS

HON. GLEN BROWDER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ALABAMA

Mr. BEVILL. We are also pleased to have with us our good friend here, Congressman Glen Browder, whose unwavering support has been very helpful to this panel and to Alabama.

Mr. BROWDER. Thank you, Mr. Chairman Bevill and Mr. Chairman Myers, I am sure you don't mind our dual references here. He will always be Mr. Chairman.

Thank you for giving us this opportunity to speak to the subcommittee about our waterways in Alabama.

I would also like to thank the gentleman from New Jersey for being here with us today to listen to our interests and invite you to come to Alabama one day. And I would note that after this hearing you will bring your wading boots, your fishing pole, your motorboat and everything else because we do have a lot of water in Alabama.

We have done this for years on Alabama day when so many of our citizens come to Washington to tell the subcommittee of the importance of our rivers and harbors. This is a special day not only because it is Alabama day, John and Tom, because we know that you will be here to work on our bill this year. That makes it special for us. We want to thank both of you for all you have done for Alabama and wish you well in your future endeavors.

Alabama's rivers are very important to us. They form an extensive transportation network and offer an excellent opportunity for continued economic development throughout our entire region.

We have more miles of navigable waterways in Alabama than any other State. Many of the users and friends of these waterways are represented here today. I will not name them since a couple of the other Members have, but we welcome them here and appreciate their work.

I support their efforts to maintain and improve these vital waterways and urge you to continue to help them. Inland and intracoastal waterways furnish an efficient and reliable means of freight transportation in many parts of the United States. Mr. Bevill does not have to be told that the barges that use the waterways provide an inexpensive means of moving high tonnage of shipment of bulk commodities and fuels. They are a substantial and growing portion of the Nation's and Alabama's economy.

A Federal role in the improvements and maintenance of inland rivers and intracoastal waterways has long been recognized. Federal funds used for that purpose amount to investments that turn over many times, producing thousands of jobs and billions in taxes. We are asking for a continuation of that type of investment.

Representatives of the user groups here will give you details of their needs. I will not mention all the projects that we have asked you about or the programs that we have asked you about. I think probably Sonny and Spencer will cover some that I have mentioned in here to add to the list. What I will ask you to do is to pay attention to the study that is going on, Alabama, Georgia and Florida. This is very important.

The committee knows about these studies to determine the availability and demands for water in my district, because all that water from Georgia flows into Alabama through my district and some of it back out to south Georgia and to Florida. I urge the subcommittee to review all of the available data carefully as you seek to help the citizens of these States use their water supplies intelligently.

Thank you very much, Mr. Chairman Bevill and Mr. Chairman Myers, and I would like to submit my testimony for the record.

Mr. BEVILL. Thank you, very much, for your fine presentation that you always make.

[The statement of Mr. Browder follows:]

STATEMENT
OF
U.S. REP. GLEN BROWDER
BEFORE THE
SUBCOMMITTEE ON APPROPRIATIONS
FOR ENERGY AND WATER DEVELOPMENT
MARCH 27, 1996

Mr. Chairman, thank you for giving us this opportunity to speak to the subcommittee in behalf of the waterways in Alabama. We have done this for years on "Alabama Day," when so many of our citizens come to Washington to tell the subcommittee of the importance of our rivers and harbors.

This is a special day. It is made even more special by the fact that you and our beloved Tom Bevill will be here to work on our bill. We thank you both for all you have done for Alabama and wish you well in your future endeavors.

Alabama's rivers are very important to us. They form an extensive transportation network and offer an excellent opportunity for continued economic development throughout our entire region.

We have more miles of navigable waterways in Alabama than any other state. Many of the users and friends of these waterways are represented here today by members of the Coosa-Alabama River Improvement Association, Inc., the Warrior-Tombigbee Development Association and the Tri-Rivers Association.

I support their efforts to maintain and improve these vital waterways and urge you to continue to help them. Inland and intra-coastal waterways furnish an efficient and reliable means of freight transportation in many parts of the United States. The barges that use the waterways provide an inexpensive means of moving high tonnage shipment of bulk commodities and fuels. They are a substantial and growing portion of the nation's economy.

A federal role in the improvement and maintenance of inland rivers and intra-coastal waterways has long been recognized. Federal funds used for that purpose amount to investments that turn over many times, producing thousands of jobs and billions in taxes. We are asking for a continuation of that type of investment. Representatives of the user groups here will give you the details of their needs.

In addition to the programs advocated by these associations, I have heard also from the City of Northport, which is seeking funding for a levee which, upon completion, will become the linchpin for future economic development in that city.

Also, the Choctawhatchee-Pea Rivers Watershed Management Authority is seeking funding to conduct an extensive study of the groundwater supplies and flood control measures in the area covered by the association. This area, like all of East Alabama, West Georgia and Florida's Panhandle could experience a critical water shortage soon.

Finally, and very importantly, this committee knows that studies are underway to determine the availability and demands for water in my district and the entire Alabama, Georgia, Florida region. I urge the subcommittee to review all of the available data carefully as you seek to help the citizens of these states use their water supplies intelligently.

2-27-96

TUESDAY, FEBRUARY 27, 1996.

ALABAMA PROJECTS

WITNESS

HON. SPENCER BACHUS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ALABAMA

Mr. BEVILL. And we are so glad to have our good friend and colleague Spencer Bachus this year.

And, Spencer, I have always thought highly of his ability and all, but I was most impressed when he married my beautiful cousin. I knew then that he was a man to watch out for in the future. So we are pleased to hear from you, Spencer, and we appreciate your good support of this panel.

Mr. BACHUS. Thank you, Tom.

It is really an honor for me to come before the committee. I married his cousin because I thought that might get a building named after me.

Mr. BEVILL. Just hang in there, it might work.

Mr. MYERS. We don't permit revisions in the testimony here, so be careful.

Mr. BACHUS. I was traveling up highway 78, which runs from Birmingham to Memphis, and trying to describe some town to a friend of mine, and I told him a railroad track ran through it. He said that helped a little bit. I told him there was a blinker light at the local school. He said that eliminated one or two towns. And I told him there was a big building in the middle of town. And he said that eliminates a few towns. And I said, now, the town I am talking about, the building is named for a Bevill, the Bevill building. He said that didn't eliminate any town.

I understand there are two towns in Marion County, 6 miles apart, which have the same name, Quin and Qu-in, and they both have Bevill buildings in them, and I think what we ought to do is have a move up there to distinguish those two towns and name one for Lou Bevill, Tom's wife, who is more popular than he is. But both towns would want their building to be the Lou Bevill building.

I do appreciate this opportunity to come before the committee. I also am sad to know that, John, you and Tom, which I consider two of my best friends in Congress, are both leaving and it is not going to be the same to come to this committee and not see you here.

I remember Dean Gallo, who I admired as much as anybody up here, and I see Rodney sitting up there, and I guess I take some comfort in knowing that even though Dean is no longer with us that he has an able replacement. I know that things have to change, but I wish you all both well. And, Rodney, welcome to the committee. I think your mother was a Congresswoman; right?

Mr. FRELINGHUYSEN. My father.

Mr. BACHUS. Was it your father? Your dad.

Mr. MYERS. Tom and I served with him.

Mr. BACHUS. That's right. So there is quite a tradition there.

Mr. MYERS. We missed Abe Lincoln.

Mr. BEVILL. That was in the early 1900s, as I recall.

Mr. BACHUS. I want to first say that I have got some constituents here that are going to talk to you about the Northport Levee. I want to introduce them each by name; or do we do that at a later time? What is customary?

Mr. BEVILL. That is all right.

Mr. BACHUS. I have Charles Swann, who is the City Administrator of Northport, if you will stand up; Waring Blackburn, who is the Planning and Development Director of Northport; Lewis Drummond, is West Alabama Chamber of Commerce President; Carl Adams, who is head of the Downtown Merchants Association; and two city councilmen, Dan Morrison and Robert Thomas.

They are here to talk to you about a very important project.

Mr. BEVILL. You have all your big guns here, haven't you?

Mr. BACHUS. I have them all here and they are all friends of Tom's. They are going to testify about the flood control levee in Northport. This is not the first time you have heard about this project, because I know Congressman Bevill has stressed the importance of it, but when we were approving funding for the Mississippi River for flood relief and for levee control there, I went out on the Floor of the House and spoke about the need for that because I knew about the need in Northport and I said there is a need in Northport. I know what that levee can mean to Northport and I know what it means to the people along the Mississippi, and I spoke about it.

At that time, I thought it was a done deal, and then I found, I heard first this rumor that the Corps of Engineers, after they appropriated over a million dollars and designed this project, a feasibility study and proved that it was much needed, that they had, although they were still funding feasibility studies, they were not going to fund design programs, which made absolutely no sense to me; that we would continue to fund feasibility studies, but then it was a dead-end street because we did not then fund the designs.

We have done that in Northport. They have looked at the projects. They said it is very much needed. We have three public schools that flood in Northport. We have public housing projects with our most vulnerable citizens that flood in Northport. And we very much need this levee.

The Corps of Engineers agree but they have said we are not going to fund any design projects. This is after the City of Northport—and they have a very exhaustive document they are going to give you that shows that they have spent hundreds of thousands of dollars of their own money for this project and made plans.

I know this committee, you all have also said this doesn't make any sense. You all formulated language and adopted legislation to fund these projects and you have been, as I say, up to this time it appears to me that we have all been ignored by the Corps of Engineers. I am very disappointed by that, and I would urge you and urge the Corps of Engineers—I have written them. They have been very polite and responsive to my letters, but I have said to them: Please fund this project. It is tremendously important to these people.

You know all about what is going on, and I just urge you to use your considerable influence and persuasive power on the Corps of Engineers and let us fund this project. It makes absolutely no sense to not protect those schools and that housing project. It would cost more to probably move the housing projects than it would to complete this project.

So with that, I will end my remarks.

I will say that Glen Browder mentioned the water problem we have over in his district. That project I hear as much about, even though most of the people affected are in Glen's district, they talk to me about that problem, and when they talk to me about it, and it is mostly in Glen's district, I know how concerned they are about it. I would stress or reiterate and reinforce what he said.

Thank you.

[The statement of Mr. Bachus follows:]

STATEMENT OF THE HONORABLE SPENCER BACHUS
BEFORE THE ENERGY AND WATER SUBCOMMITTEE
FEBRUARY 27, 1996

I am pleased to have the opportunity today to testify before this Subcommittee. I applaud the leadership of my two friends and colleagues Chairman John Myers and former Chairman Tom Bevill. This Congress is certainly losing not only two great leaders but two experts on these important energy and water issues when both of these respected gentlemen retire at the end of this term. I am privileged to have had the opportunity to know and serve with both of them.

I am also glad to introduce some of my constituents from Northport, Alabama: Mr. Charles Swann, Mr. Waring Blackburn, Mr. Lewis Drummond, Mr. Carl Adams and Councilmen Dan Morrison and Robert Thomas. You will hear from them later this morning on the subject of an important flood control levee for the community of Northport.

I vividly remember going on the House floor in 1993 when communities all along the Mississippi River had just been devastated by flooding. At that time, Congress was asked to provide several billion dollars in funding to help these communities rebuild.

At that time, I spoke about the chronic flooding inflicted upon Northport, Alabama and the tremendous benefit that a flood control levee would provide to help prevent this same kind of devastation from occurring in Northport. A $1.5 million appropriation was given and work began on a feasibility study that was completed this past June. Northport was then ready to begin the design phase.

At that time, it was rumored that the Army Corps of Engineers was discussing a policy change that would cut off money for those projects that were in the design phase. Reflecting this Committee's strong support for projects like the Northport Levee, language was inserted in the FY-96 Energy and Water Appropriations bill disapproving the plan to stop projects in the design phase.

Again, thanks to the leadership of this Subcommittee, the Energy and Water Appropriations bill won quick approval and was signed into law.

Recently, I was very troubled to learn from correspondence with the Army Corps that the Corps plans to ignore the will of Congress. The Corps has indicated that it still plans to halt funding for on-going projects, and waste all the federal dollars previously spent on these projects, while approving expenditures for brand new projects. It is hard to understand why the Army Corps of Engineers would put on hold these important projects that will prevent flooding. As we have seen this year in the Northwest and East, flooding is a serious problem that costs the government much more than the investment we have placed in these feasibility studies. Congress should act to reprogram additional monies for these much needed flood control projects and look into the blatant disregard of Congressional intent from the Army Corps regarding Section 205 Flood Control Projects.

I urge the Committee to take action once again to ensure that projects that have already been initiated are successfully completed so that we can prevent communities like Northport from being devastated by flooding.

Again, thank you for the opportunity. I am sorry that I cannot stay to hear all of the testimony.

Mr. BEVILL. Thank you. Very good.

That project is one that is very, very critical, and I remember as far back as when I took a tour of it one time with Congressman Harris, the mayor and all, and even then we saw the damage that the floods have caused in the Northport area. I am very concerned about that and I hope that we can get something done about it.

TUESDAY, FEBRUARY 27, 1996.

ALABAMA PROJECTS

WITNESS

HON. SONNY CALLAHAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ALABAMA

Mr. BEVILL. We are also pleased to have our good friend and colleague here, Congressman Sonny Callahan, who has done a tremendous job in his area down there with the State docks. And as we say, all the roads lead to Rome. All the waterways lead to Mobile in the Alabama area, almost, except the Tri-Rivers. That is the only one I guess that would be an exception. Certainly, that is where the action is, the tonnage, and where the exports are and where they leave from—and Sonny has been great to work with. This committee has worked closely with him.

By the way, I don't know how many of you are aware of it or not, but he is Chairman of one of the appropriation panels and he is one of those Cardinals that you have heard of, and so you might treat him with a little more respect from now on.

Mr. CALLAHAN. I thank you, Mr. Chairman.

Mr. BEVILL. We are pleased to have you, Sonny.

Mr. CALLAHAN. Chairman Myers, I would like to tell you one thing. You have proudly, and rightfully so, mentioned that you passed your bill before October. I passed mine in January. Of course, mine was a year late, but nevertheless.

Mr. MYERS. Better than some have done.

Mr. CALLAHAN. Twelve years ago when I came to Congress, I recognized the importance of water commerce in my district. The briefing that you get as a freshman Member of Congress—when you look at the paper industry, you look at the Port of Mobile, you look at the chemical industry and the fact that we are the entering point and the end of the Tennessee-Tombigbee, our entire economy in south Alabama revolves around water.

When I was briefed on the needs of the State, I found it imperative that I get close to Chairman Bevill at the time. I also found being in the Minority party that I should get close to the Ranking Minority Member, now Chairman Myers. So I made it a point to get close to both of you, not specifically for that selfish reason, because you are easy to like, both of you, but because of sheer necessity. So I nurtured you, I entertained you. I have had Tom Bevill at my condominium in Gulf Shores.

Mr. BEVILL. We didn't know you were cultivating us. We thought you just liked us.

Mr. CALLAHAN. I filled his car with seafood when he would leave my condominium, and then, just to make certain, we even had a fund-raiser for Mr. Bevill in Mobile, Alabama. Now, here is a Republican raising money for a Democrat.

But I recognized how important you were to me, Tom. And just to cover my base, that in the event we ever did achieve a Majority, the Republicans, I even brought John Myers to Mobile, Alabama, and, boy, did I have it made. Here two of my closest friends in Congress, in these two most powerful positions, then Myers assumes the chairmanship, everything is going along, and today we find that both of you are going to retire.

And so, Rod, I want to invite you to my district—you are one of the finest people I have ever met.

Seriously.

Mr. BEVILL. Rod, you cannot let him give you any seafood now with our ethics.

Mr. FRELINGHUYSEN. Mr. Chairman——

Mr. CALLAHAN. Members to Members is all right.

Mr. FRELINGHUYSEN. Mr. Chairman, if you will yield; I am glad I came.

Mr. CALLAHAN. Seriously, I am going to submit my statement for the record. But I just want to tell you that I don't suppose there is a district in the United States that is as dependent upon what this committee does, unless it may be New Orleans, which has greater needs than we have because of their water system over there, than mine. Not only for Mobile but for the entire country, you all each year have passed a nonpartisan type of bill out of this committee that has provided for the needs of the water commerce and clean water protection and the power systems of this country, and the Congress is going to miss you. There is no doubt about that, and I am going to miss you.

I am going to be here, hopefully, for another couple years anyway, and talking about Mobile Channel needs, which will continue to need dredging, and talking about Bayou La Batre, talking about the Port of Jackson and Tenn-Tom mitigation, all of these things that you all have helped me with throughout the years and have made Mobile a very viable port and a very important part of our economy.

So this is not a wake, and you guys are not dying, you are going to be around for another year or so. I was talking to the highway director in Mobile—and, by the way, when we named the Bevill Bridge over Dog River, which is about half a mile from my house, I got the money from that through my committee. But you are going to be around.

I was talking to the highway director, and I suggested to him, I said we have a revolving door problem here. We cannot come back and lobby each other, but you ought to consider utilizing Tom Bevill because of his vast knowledge of transportation needs in Alabama and the ways and means to resolve those problems.

So, John, you are still welcome back to Mobile, and so are you, Tom, and your wives are welcome back in my district because you have helped me tremendously in procuring what I need for my water problems, but you have helped me more even through the friendship that you have given me during these 12 years. It has been a pleasure serving with you. I look forward to the next 12 months or so, and look forward to passing your bill, hopefully as early as July of this year, and my bill, hopefully, as early as maybe February of next year. But, nevertheless, thanks for what you have done and thanks from the people of Alabama for the help you have both given to us.

[The statement of Mr. Callahan follows:]

STATEMENT OF CONGRESSMAN SONNY CALLAHAN

BEFORE THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

HOUSE COMMITTEE ON APPROPRIATIONS

FEBRUARY 27, 1996

It is with a true sense of sorrow that I appear here today for the last Alabama Day under the leadership of the distinguished chairman and ranking member. Although I trust the Alabama tradition will continue, I know this nation will certainly miss the expertise and understanding of our water projects that these two giants have given over many years of service.

The First District of Alabama has many water resources projects which continue to require federal support. I appreciate having the opportunity to appear here on behalf of a broad constituency in our state in support of fiscal year 1997 funding for these projects. Unfortunately, the FY 1997 budget has not yet been presented to Congress so I am not able to request specific funding levels. However, I would ask that the subcommittee allow me to submit follow-up information when the budget is available.

The Bayou La Batre channel deepening project is of special personal interest to me, and I am grateful for the support the subcommittee has consistently given. The community has worked extremely hard to uphold its responsibility for the project. Bayou La Batre is a major seafood and shipbuilding center. In recent years it has become a critical site for offshore natural gas development. The natural gas reserves in Mobile Bay and offshore of our coastline are projected to be some of the largest fields in the United States. Related activities have centered in Bayou La Batre which is, unfortunately, not well-equipped to handle shipping traffic. Better access is critical, and the channel deepening project will facilitate this activity for the benefit of the entire State of Alabama. I hope the committee will approve continued construction funding for the Bayou La Batre channel.

Another project that I am proud of is the Tennessee-Tombigbee Wildlife

Mitigation program. I appreciate the committee's previous support for the program and urge its continued endorsement. The Tenn-Tom mitigation program differs from most mitigation projects in two ways. First, it directs that property may be purchased only from willing sellers. Second, the program is administered by state officials. These provisions have made the program acceptable to the public, and I believe future mitigation plans should incorporate similar conditions. I urge the subcommittee to approve adequate funding for the program.

Construction of navigation improvements on the Black Warrior-Tombigbee in the vicinity of Jackson, Alabama, is critical and will establish a port at Jackson. I encourage full funding of this construction.

The First Congressional District of Alabama is blessed with abundant water resources which support the livelihood of thousands of families and provide recreational benefits to our residents and visitors. Maintenance of these waterways is critical to the movement of commodities and enhances our efforts to reduce the United States' trade deficit. The following projects have the need for ongoing maintenance funds and I ask that their O&M be fully funded: Mobile Harbor, Bayou La Batre Channel, Gulf Intracoastal Waterway, Alabama-Coosa River System, Black Warrior-Tombigbee Rivers, Dauphin Island Bay, Henry Lock and Dam, Millers Ferry Lock and Dam, Bayou Coden, Perdido Pass Channel, Tennessee-Tombigbee Waterway, Fly Creek, and Dog and Fowl Rivers.

It is also critical that we continue to fund the Alabama-Coosa-Tallapoosa and Apalachicola-Chattahoochee-Flint Rivers Comprehensive Water Study. Continued study will help us better understand the water needs of the states of Alabama, Georgia and Florida. Absent a comprehensive understanding of this controversial issue, I fear disputes between these states will continue. This matter must be resolved and continued funding will be helpful in that regard.

Again, I am pleased to have the chance to make my interests known. I commend the Chairman and the subcommittee members for their excellent work.

Mr. BEVILL. Sonny, we appreciate you very much.

And you know, you all have to start practicing now, you will have to start calling him dean, as of noon January the 3rd, he will be dean of the House delegation.

Mr. CALLAHAN. If I am here.

Mr. BEVILL. He will be here.

Thank you each very much, and I know many of you have to get back to your committees. Of course, you are welcome to stay with us. We are always glad to have your good company.

But next we will recognize——

Mr. MYERS. Thanks for the nice words from each of you.

Mr. BEVILL. I hope you got all those good words down in the record here.

Mr. CALLAHAN. I wrote mine down, Mr. Chairman.

TUESDAY, FEBRUARY 27, 1996.

WARRIOR-TOMBIGBEE WATERWAY AND PORT OF MOBILE

WITNESSES

CHARLES HAUN, CHAIRMAN, WARRIOR-TOMBIGBEE DEVELOPMENT ASSOCIATION

SHELDON L. MORGAN, PRESIDENT, WARRIOR-TOMBIGBEE DEVELOPMENT AUTHORITY

Mr. BEVILL. Our good friend Mr. Charlie Haun, you, I understand, will be speaking first, and Mr. Sheldon L. Morgan here, is the President of the Warrior-Tombigbee Development Association, and he has done a tremendous job.

And I think he has been coming here just about as long as I have been here; haven't you, Sheldon?

Mr. MORGAN. I think so.

Mr. BEVILL. So your leadership has been very important on the Warrior-Tombigbee Development Association which is one of our main arteries of navigable waterways in Alabama, and so the Chair recognizes you, Charles, at this time.

Mr. HAUN. Good morning. I am Charles Haun, Chairman of the Warrior-Tombigbee Development Association. On behalf of the users and operators of the waterways, I want to thank you for the opportunity to be here today and to express our appreciation for the support this waterway has received in the past.

I especially want to thank both Chairman Bevill and Chairman Myers for whose leadership our Nation's waterways are the envy of the entire world.

The Warrior-Tombigbee Waterway links the Tennessee-Tombigbee Waterway and the coalfields, the forests and the steel-making centers of central Alabama to the Port of Mobile. It serves five coal-fired electric generating plants. The waterway is a vital part of our State and national economy.

At this time, I would like to call on Sheldon Morgan, President of the Warrior-Tombigbee Development Association.

Mr. MORGAN. Thank you, Mr. Chairman, it is nice to be with you again.

Mr. BEVILL. Pleased to have you with us again.

Mr. MORGAN. Mr. Chairman Myers, it is good to see you again. We have been coming up here for many years I think, and we are going to miss you all. It is going to be different. And we will continue to come in the future, and if you will stay in touch with us, we will seek your guidance and counsel. We would like to have that opportunity as we continue.

Mr. MYERS. Better bring Tom with you next year.

Mr. MORGAN. Well, you all know and you have heard this year in and year out, but I would like to summarize a written statement which will be filed for the record. We also have nine supporting statements for our organization, of major corporations that utilize this system and depend on its activity, its vitality for the operations of their companies, and these will be filed for the record.

[Supporting statements follow:]

WARRIOR-TOMBIGBEE DEVELOPMENT ASSOCIATION

CHAIRMAN
Charles A Haun
Executive Vice President
Parker Towing Company
Tuscaloosa Alabama

VICE CHAIRMAN
James C Ludwig
President
Drummond Coal Sales
Birmingham Alabama

PRESIDENT
Sheldon L Morgan
Mobile Alabama

SECRETARY TREASURER
William A Powell, Jr
Vice Chairman (Ret)
AmSouth Bank N A
Birmingham Alabama

ASSISTANT
SECRETARY TREASURER
Andrew A Saunders, Jr
Saunders Engine Company
Mobile Alabama

STATEMENT FOR
Subcommittees on Energy & Water Development
United States House of Representatives

February 27, 1996

List of Witnesses - 1996

The Honorable Howell Heflin	Senator, Alabama
The Honorable Richard Shelby	Senator, Alabama
The Honorable Spencer Bachus	Member of Congress, Alabama
The Honorable Glenn Browder	Member of Congress, Alabama
The Honorable Sonny Callhan	Member of Congress, Alabama
The Honorable Ron Cramer	Member of Congress, Alabama
The Honorable Terry Everett	Member of Congress, Alabama
The Honorable Earl Hilliard	Member of Congress, Alabama

Representing Governor Fob James:

Mr. Walter Stevenson	Chief, Office of Water Resources Alabama Department of Economic And Community Affairs
Mr. Charles Haun	Chairman, Warrior-Tombigbee Development Association
Mr. Sheldon L. Morgan	President, Warrior-Tombigbee Development Association
Mr. John Carey	General Manager, Administration Alabama State Docks

FY97 Appropriations
February 27, 1996

STATEMENT FOR
SUBCOMMITTEES ON ENERGY & WATER DEVELOPMENT
UNITED STATES HOUSE OF REPRESENTATIVES

FEBRUARY 27, 1996

SUMMARY OF THE REQUEST

The following is a summary of the funding items for the U. S. Army Corps of Engineers for FY97 to meet the needs of the Warrior-Tombigbee Waterway, and which we ask the Committee to approve:

Warrior-Tombigbee Waterway	
Operations & Maintenance Funds included in Corps'Budget Request (3% under level funding)	$16,315,000
Funds for Additional Capability for O&M, not included in Corps' Budget Request	4,650,000
Total O&M Funds Required	$20,965,000

Other needs allied to the Warrior-Tombigbee are:

Mobile Harbor	
Operations & Maintenance Funds, included in Corps' Budget Request (Level Funding)	$17,780,000

We wish to highlight the item identified above as "Additional Capability". Since funds for this item would not normally be included in the Corps' Budget Request, it is not likely that the committee has been informed of the essentiality of funding for this particular Additional Capability. In the absence of the Corps FY97 budget information at this time we are requesting the additional funds for continuing projects. We emphasize the need for additional O&M Capability funds if we are to have an adequate current year program, and to support on-going projects designed to improve safety and efficiency and to reduce future costs. Projects to be funded from this request are continuing projects under the 20 year long range plan for improving the BWT, including certain equipment needs for handling emergencies, upland disposal sites which, when implemented, help reduce annual dredging costs, mooring cells and other improvements.

Written statements of support are attached.

WARRIOR-TOMBIGBEE
DEVELOPMENT ASSOCIATION

SUPPORTING STATEMENTS

CHAIRMAN
Charles A. Haun
Executive Vice President
Parker Towing Company
Tuscaloosa, Alabama

VICE-CHAIRMAN
James C. Ludwig
President
Drummond Coal Sales
Birmingham, Alabama

PRESIDENT
Sheldon L. Morgan
Mobile, Alabama

SECRETARY-TREASURER
William A. Powell, Jr.
Vice Chairman (Ret.)
AmSouth Bank, N.A.
Birmingham, Alabama

ASSISTANT
SECRETARY-TREASURER
Andrew A. Saunders, Jr.
Saunders Engine Company
Mobile, Alabama

Alabama, State of
Alabama Electric Cooperative, Inc.
Alabama Land and Mineral Corporation
Alabama Power Company
Alagasco
American Commercial Barge Line Company
BellSouth
Buffalo Rock Company
Crounse Corporation
Drummond Coal Sales, Inc.
First Alabama Bank
Gulf Power Company
Henry Marine Service, Inc.
Jim Walter Resources, Inc.
Kimberly-Clark
Kirby Corporation (Dixie Carriers)
Midland Enterprises, Inc.
Midstream Fuel Service, Inc.
Mobile Area Chamber of Commerce
Monsanto
Navios Ship Agencies, Inc.
Parker Towing Company, Inc.
Ryan-Walsh, Inc.
Saunders Engine Company, Inc.
Southern Company Services, Inc.
Tuscaloosa, City of
U. S. Steel
Volkert & Associates, Inc.
Warrior & Gulf Navigation

International Trade Center, 250 North Water Street, Mobile, Alabama 36602
P.O. Box 2863, Mobile, Alabama 36652 • Phone (334) 431-9055, Fax (334) 431-9053

STATE OF ALABAMA
GOVERNOR'S OFFICE
MONTGOMERY 36130

FOB JAMES, JR.
GOVERNOR

February 27, 1996

The Honorable John T. Myers, Chairman
Subcommittee on Appropriations for
Energy and Water Development
United States House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Thank you, for the opportunity to provide our views concerning the Federal water resources activities and projects in Alabama. I join with the Tennessee-Tombigbee Waterway Development Authority; the Warrior-Tombigbee Development Association; the Coosa-Alabama River Improvement Association; the Tri-Rivers Waterway Development Association; the Tennessee River Valley Association and others in support of the continuation of Federal water resource projects in Alabama.

Our state and Nation have been blessed with water resources which lend themselves to the development and use for the benefit of our citizens. Water resource developments in Alabama include: the deep harbor and extensive port facilities at the Port of Mobile, providing export opportunities for the region and nation's products; the Tennessee-Tombigbee Waterway providing a vital connecting link to the inland waterway system and the heartland of our nation; the Warrior-Tombigbee Rivers waterway providing opportunities to utilize our abundant coal resources for our domestic use and export of steel, pipe, and other products; the Coosa-Alabama and the Chattahoochee-Apalachicola waterway providing the opportunity for development, transportation of natural resources, agricultural and forest products; the Tennessee River waterway providing a vital transportation link in the Tennessee River Valley of Alabama; and the Gulf Intracoastal Waterway providing a vital waterway link to the ports of the Gulf of Mexico.

All of the waterways in Alabama are connected to and are an integral part of, our national inland waterway transportation system providing a conduit for the economical and safe movement of commerce.

I respectfully request your consideration and assistance by providing the federal funding necessary for the full time operation of the federal waterway facilities and projects in Alabama The federal support is necessary to ensure the continuation of these projects and to allow for use of these important facilities, both public and private The federal funding, while an essential element, however, represents only a portion of the investment and commitment necessary to utilize these resources. A combination of local investment, both private and public, is also necessary to gain benefits for our citizens.

On January 3, 1992, the States of Alabama, Florida, Georgia, and the U.S. Army Corps of Engineers signed a Memorandum of Agreement (MOA) concerning interstate water resource issues in the Alabama-Coosa-Tallapoosa (ACT) and the Apalachicola-Chattahoochee-Flint (ACF) River Basins. This agreement will terminate on September 30, 1996. The MOA temporarily set aside the interstate dispute between the parties, while Alabama, Florida, Georgia, and the Corps of Engineers jointly participate in the ACT/ACF Comprehensive Water Resources Study This study will provide information which will assist in an understanding of the capabilities of the water resources to meet the forecast needs of the region for the foreseeable future. It should also provide tools to evaluate water management options to meet future demands with the finite water resources. Hopefully, the study will also recommend an appropriate and agreeable management structure for the ACT and ACF basins We anticipate this study will provide a basis for a better understanding for our water resources resulting in negotiations that provide an equitable sharing of interstate water.

With the continued endorsement of the Subcommittee in providing the funding necessary for the federal water resource projects in Alabama, I believe we can successfully address the complex issues facing us and best utilize these water resources to the benefit of the Nation.

Thank you, and the other members of the Subcommittee, for your support of the federal water resource projects and activities in Alabama and the nation.

Sincerely,

Fob James, Jr.

Fob James, Jr.
Governor

Alabama Electric Cooperative, Inc.
Post Office Box 550
Andalusia, Alabama 36420
Phone: (334) 222-2571
Fax: (334) 222-3860

James A. Vann, Jr.
President and
Chief Executive Officer

February 1, 1996

The Honorable John Myers, Chairman
House Subcommittee on Appropriations
For Energy & Water Development
U.S. House of Representatives
Washington, D.C. 20515

RE: FY97 Corps of Engineers Funding for the Warrior-Tombigbee Waterway and the Mobile Harbor

Dear Mr. Chairman:

On behalf of Alabama Electric Cooperative, Inc. (AEC) and its member owners, I request your continued support for the FY97 Corps of Engineers' funding for the Warrior-Tombigbee Waterway and the Port of Mobile. The enclosed statement explains AEC's interest in these projects and our increasing use of them to transport coal to our Lowman Power Plant via barge. The benefits of low-cost coal transportation to our plant accrue to our member systems and in turn to their individual electrical customer-owners, who number approximately 280,000.

Please give your support to the Corps of Engineers' budget requests for the Warrior-Tombigbee Waterway and the Port of Mobile. We sincerely appreciate your continued support in this matter and in other issues related to the rural electric program.

Sincerely,

James A. Vann, Jr.
President and Chief
Executive Officer

JAVjr:RBWjr:rbw

Enclosure

cc: Mr. Sheldon L. Morgan w/ enclosure

Alabama Electric Cooperative, Inc.
Statement of Support
FY97 Corps of Engineers Funding
Warrior-Tombigbee Waterway & Port of Mobile

Background Information

Alabama Electric Cooperative, Inc. (AEC) is a wholesale power supplier for 21 member-owners located in central and south Alabama and northwest Florida. The member-owners serve over 280,000 consumers. AEC operates the Charles R. Lowman Power Plant, located at Milepost 89.5 on the Tombigbee River, as well as a compressed air energy storage plant, the McIntosh Plant which impacts the amount of coal required at the Lowman Plant. Also, AEC has a site on the Black Warrior-Tombigbee River which is a possible location for a future base-load fossil fired generating plant.

Statement of Interest and Support

AEC's primary electric generating plant, the Lowman Plant, is located on the Tombigbee River near Jackson, Alabama. The Black-Warrior Tombigbee Waterway (BWT), the Tenn-Tom Waterway, and the Port of Mobile are vital to our delivery of coal economically and efficiently to this plant. During calendar year 1995, we shipped 874,044 tons of coal via the BWT and for 1996 we have purchased a total of 1,100,000 tons of coal which will be delivered via the Tenn-Tom Waterway and the BWT.

Because delivered coal cost is such an important factor in our ability to maintain competitive rates to our member-systems, AEC supports the Warrior-Tombigbee project and level funding in the Corps of Engineers' budget request. In addition, AEC supports the critical needs identified by the Corps which were pre-empted from last year's budget.

In addition to the obvious dependency which AEC has upon the BWT, there are benefits to our region and our end customers as a direct result of a viable BWT waterway and the Port of Mobile. These systems provide an invaluable link between our region and the world markets. As such, they stimulate the region's economy, provide jobs and help reduce the trade deficit.

Specific Benefits of the Warrior-Tombigbee Waterway and the Port of Mobile to AEC

The amount of coal moved to AEC's Plant Lowman by barge on the BWT for the past five years is as follows:

Year	Tons
1991	1,000,570
1992	1,114,742
1993	866,731
1994	1,077,485
1995	874,044
Total:	**4,933,572**

The savings in transportation costs represented by the above tonnage exceeds $20 million.

AEC plans to move a minimum of 1.1 million tons of coal via the BWT in 1996, and we project our usage of the waterway to remain at this level or increase in the next ten years. We have evaluated imported coal on several occasions, and the economics have been improving. Thus, we see the potential for the use of the Port of Mobile in conjunction with the BWT in delivering coal for our future needs.

Statement with Regard to Appropriation Amounts

AEC supports the appropriation of $16.3 million for Operation and Maintenance in the Corps of Engineers' FY97 Budget. We view this as a minimum requirement in that this level of O&M funding is necessary to cover the minimum expected needs for FY97 according to the Warrior-Tombigbee Development Association, of which AEC is a member. Further, this amount represents a 3 percent reduction in the requested amount from the previous year's budget request by the Corps.

In addition, the Corps has the opportunity to move forward on projects which have been deferred over the past two years. Since there are no new construction needs for the BWT, AEC supports funding of these projects which total $4,650,000.

AEC also supports the appropriation of adequate O&M funds for Mobile Harbor.

Conclusion

We appreciate the opportunity to submit a statement on behalf of our member-owners in central and south Alabama and northwest Florida pertaining to the benefits of the BWT waterway and the Port of Mobile. AEC and its member-owners fully support the Corps of Engineers' 1997 budget request for $16.3 million in operations and maintenance funds for the BWT waterway, as well as the appropriation of an additional $4,650,000 in funds for deferred projects which the Corps is in a position to complete. While we are well aware of budget constraints, we believe these projects should be funded at these levels to assure a viable transportation system. With the money that has already been spent in construction of the BWT transportation system, proper funding for operations and maintenance is, in our view, prudent management of what is undoubtedly a national asset.

ALABAMA LAND AND MINERAL CORPORATION
P.O. DRAWER 160 • ABERNANT, ALABAMA 35440 • 205 477-5731

January 29,1996

The Honorable John Myers, Chairman
House Subcommittee on Appropriations
For Energy and Water Development
U.S. House of Representatives
Washington, D.C. 20515

Dear Chairman Myers:

Alabama Land and Mineral Corporation is a coal mining company with coal mines and transportation facilities located in Jefferson, Tuscaloosa, Bibb, and Walker counties in Alabama. In 1996, our 150 employees will produce approximately 1.3 million tons of coal to be marketed to customers in both the domestic and export marketplace.

Transportation of coal is an important consideration for Alabama coal producers. The extensive transportation system in effect within the state makes Alabama's coal resources even more attractive. Although Alabama has four navigable River Systems, the Black Warrior-Tombigbee River System is the principal system for coal shipments by water within the state. Almost every part of the productive Warrior Coal Basin is connected to the Port of Mobile by waterways providing barge access. Alabama Land and Mineral Corporation operates a barge coal loading facility on the Warrior River in Walker County, Alabama. This facility loads one-half million tons of coal annual on barges to be shipped down river to power plants along the waterway or the Port of Mobile.

The Alabama State Docks at the Port of Mobile operates the McDuffie Coal Terminal which is the largest on the Gulf Coast and one of the most efficient coal handling facilities in the United States. Its annual operating capacity is in excess of 20 million tons. The Port of Mobile is served by more than 100 steamship lines, with connections to major ports in Latin America, United Kingdom, Europe, Mediterranean, Africa, Asia, and the Pacific.

In order for our company to be competitive in the World Coal Market, we must have access to a waterway system, such as the Warrior-Tombigbee System and the Port of Mobile facility. Alabama Land and Mineral Corporation has joined with the Warrior-Tombigbee Development Association in an effort to improve the efficiency and reliability of the Warrior-Tombigbee Waterway. It is essential that the proper appropriations of funds be made for the operation, maintenance, and improvement of the Warrior-Tombigbee Waterway System. Without these funds the efficiency and reliability of the waterway will be degraded, causing the energy trade deficit to continue to rise in the form of lost revenue, taxes, economic opportunity, and jobs for Alabamians. Your committee should make an effort to reverse this energy trade deficit by helping establish Alabama as a leading exporter of coal. Alabama Land and Mineral Corporation strongly supports the appropriation of $16.3 million in operation and maintenance funds for the Warrior-Tombigbee Waterway.

Sincerely,

Tim McCoy
President

Southern Company Services, Inc.
Post Office Box 2625
Birmingham, Alabama 35202
Telephone 205 877-7704

Bill M. Guthrie
Senior Executive Vice President and
Chief Production Officer

the southern electric system

February 8, 1996

The Honorable John Myers, Chairman
House Subcommittee on Appropriations
For Energy & Water Development
U. S. House of Representatives
Washington, D. C. 20515

Dear Congressman Myers:

The Warrior-Tombigbee Waterway is vital to the economic health of Alabama. The state's water transportation system must be efficient and well-maintained for the basic industries, such as mining and heavy metals, to provide a sound economic base for the state and for Alabama to enjoy economic growth.

Alabama Power Company's continued interest in the Warrior-Tombigbee Waterway is two-fold. First, our business is dependent on the general economic health of the state; and, second, we are a primary user of the waterway. For over three decades, we have used economical water transportation to deliver coal to two of our major electric generating plants.

Four of Alabama Power Company's seven fossil-fueled, electric generating plants are located on the Warrior-Tombigbee Waterway system. Coal from the Warrior coal field is delivered to locations near the coal field and loaded into barges for shipment to two generating plants in the southern and central parts of Alabama. The 1,525-megawatt Plant Barry in Mobile County, which began operation in 1954, is supplied primarily by the Warrior-Tombigbee Waterway, as in the 500-megawatt Plant Greene County near Demopolis. Also a portion of the coal requirements for the 2,640-megawatt Plant Miller in Jefferson County is delivered using the waterway.

Adequate funds for operation and maintenance must be made available for the Corps of Engineers to continue efficient operation of the waterway and to avoid expensive and unnecessary interruptions to river traffic. While we fully support the appropriation of $16.3 million in O&M funds, the Corps has additional capability to get underway on these projects which have been deferred over the past two years. They are vital to continuing the improvements year to year which ultimately will bring the waterway efficiency to an expected level. These projects total $4,650,000.

Alabama Power Company received 6.4 million tons of coal in 1995 which were transported on the Warrior-Tombigbee Waterway. This represented over 31 percent of the 20.2 million tons used in generating units operated by Alabama Power Company. Failure to properly maintain the waterway can have a significant adverse effect on the cost of providing electric service to Alabama Power Company's approximately 1.2 million customers.

Alabama Power Company supports the collective efforts of the Warrior-Tombigbee Development Association, of which it is a member, to obtain for the Corps of Engineers an adequate operations and maintenance budget which will insure the long-term efficient and economical viability of the waterway.

Sincerely,

Bill M. Guthrie

Bill M. Guthrie

BMG:pp

Roy F. Etheredge
Senior Vice President

Alagasco

ALABAMA GAS CORPORATION
2101 Sixth Avenue North
Birmingham, Alabama 35203
Telephone (205) 326-8429

February 16, 1996

The Honorable John Myers, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
U.S. House of Representatives
Washington, D.C. 20515

Dear Congressman Myers:

The Warrior-Tombigbee Waterway is vital to the economic health of Alabama. The State's water transportation system must be efficient and well-maintained for the basic industries, such as mining and heavy metals, to provide a sound economic base for the State and for Alabama to enjoy economic growth.

Adequate funds for operation and maintenance is necessary for the Corps of Engineers to continue efficient operation of the waterway and to avoid expensive and unnecessary interruptions to river traffic. Therefore, we support appropriation of $16.8 million in O & M funds for the Black Warrior-Tombigbee plus adequate funds for Mobile Harbor during fiscal year 1996.

Alabama Gas Corporation supports the collective efforts of the Warrior-Tombigbee Development Association, of which it is a member, to obtain for the Corps of Engineers an adequate operations and maintenance budget which will insure the long-term efficient and economical viability of the waterway.

Sincerely,

R. Etheredge

Roy F. Etheredge

/jl

American Commercial Barge Line Company

C. William Kinzeler, II
Vice President &
General Manager

January 30, 1996

The Honorable John Myers, Chairman
House Subcommittee on Appropriations
For Energy & Water Development
United States House of Representatives
Washington, D.C. 20515

Dear Representative Myers

American Commercial Barge Line supports the Corps of Engineers' budget request of $16.3 million for the Warrior-Tombigbee Waterway.

Since its inception, ACBL, America's largest inland river transportation company, has utilized the Warrior-Tombigbee Waterway to convey many bulk commodities that are critical to our nation's agricultural, chemical, steel production, and power-generating industries. We have also periodically used the Waterway as emergency conveyance during periods of restricted navigation on both the Ohio River and Mississippi River systems. This alternative has prevented temporary plant shutdowns and consequent loss of production and jobs.

ACBL's use of the Warrior-Tombigbee system and the Port of Mobile is still rather anemic. This lack of activity is not a function of the system or facility, but rather focused attention on business on the main stream system. As mentioned above, we have moved significant tonnage of many bulk cargoes. Our sales and marketing group continue to research business opportunities that positively impact our company as well as the local and state's economy. Therefore, we support the funding request of $4.6 million.

ACBL appreciates your committee's consideration in reviewing this funding request. Adequate maintenance of the Warrior-Tombigbee system is imperative to support our national transportation objectives and to develop additional competitive international markets.

Yours very truly,

C. William Kinzeler, II
Vice President and General Manager
Gulf Coast Operations

CWK:jg

Pushing for Quality

5800 River Road • P.O. Box 23206 • Harahan, LA 70183 • Phone (504) 733-7870 • Fax (504) 736-1278
a unit of CSX Corporation

BELLSOUTH

Corporate & External Affairs
Suite 301N
3196 Highway 280 South
Birmingham, Alabama 35243

205/972-2415 or
Toll Free 1-800-292-8186
FAX 205/972-4039

Michael P. Harbin, C.E.D.
Director - Economic Development

February 20, 1996

The Honorable John Myers, Chairman
House Subcommittee on Appropriations
For Energy & Water Development
U. S. House of Representatives
Washington, DC 20515

Dear Representative Myers:

As Director of Economic Development for BellSouth in Alabama, my interest lies in the development of our economic base to improve the overall quality of life for each Alabamian. The infrastructure needed to build this economic base, be it waterway or electronic highways, is essential to conduct our business and commerce. The Warrior-Tombigbee Waterway and the Port of Mobile are two such projects that will have a direct impact on Alabama's economy.

We support the efforts of the Warrior-Tombigbee Development Association because we believe their efforts will lead to long-term benefits in the area of energy conservation, international trade and the improvement of the economic well-being of Alabama citizens.

I would also like to lend my support to the Corps of Engineers' request for adequate funding for the operation and maintenance of the waterways and ports.

I appreciate your taking my endorsement of these projects into consideration. I am confident the Association can count on your support as well.

Very truly yours,

USA
Official Sponsor of the 1996 U.S. Olympic Team

BUFFALO ROCK COMPANY

JAMES C. LEE JR
CHAIRMAN OF THE BOARD

P. O. BOX 10048 (35202) 111 OXMOOR ROAD (35209)
BIRMINGHAM, ALABAMA
(205) 942-3435 FAX (205) 942-2601

FOR THE COMMITTEE

February 14, 1996

Mr. Sheldon L. Morgan, President
Warrior-Tombigbee
Development Association
Post Office Box 2863
Mobile, Alabama 36652

Dear Mr. Morgan:

We employ approximately 2,000 people in a 3-state operation, with our headquarters in Birmingham. We fully recognize the extreme importance of the Corp of Engineers receiving proper appropriations to maintain the viability of the Tombigbee Waterway. There is no question that this waterway and the Port of Mobile does much to keep transportation costs at an affordable level.

A strong Port of Mobile, plus the Tombigbee Waterway, is a great asset for the entire South East and Mid-West area and will even become more so in the years ahead. Please continue to give us your assistance and help.

Yours truly,

James C. Lee, Jr.

James C. Lee, Jr.

JCLJr/ma

PEPSI COLA MOUNTAIN DEW - DR PEPPER SEVEN UP SUNKIST - GRAPICO BUFFALO ROCK

CROUNSE CORPORATION
2626 BROADWAY POST OFFICE BOX 8109 PADUCAH, KENTUCKY 42002-8109 (502) 444-9611
RIVER TRANSPORTATION

February 21, 1996

The Honorable John Myers, Chairman
House Subcommittee on Appropriations
For Energy & Water Development
U. S. House of Representatives
Washington, D. C. 20515

Dear Mr. Myers:

Maintenance and improvements to the Warrior-Tombigbee Waterway and Mobile Harbor are a matter of vital interest to our Company. Crounse Corporation has, since 1990, barged approximately one million tons of coal per year from the Upper Ohio Valley to locations on the Black Warrior River and Mobile, Alabama area.

In 1995, we began moving coal from the upper reaches of the Black Warrior to destinations in the Ohio Valley and hope this becomes a steady movement. We have found the Warrior-Tombigbee Waterway to be our highest cost operating area, and can ill afford to have the system deteriorate below its present level, because of reduced maintenance funding.

Sincerely,

Lynn Sherrill
Vice President
Operations

530 Beacon Parkway, West
Suite 200
Birmingham, Alabama 35209-3196

Telephone: 205 945-6400
Telex: 261327 Drum Ur

James C. Ludwig
President, Domestic Sales

**DRUMMOND
COAL
SALES, INC.**

January 29, 1996

The Honorable John Myers, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
U.S. House of Representatives
Washington, DC 20515

Dear Congressman Myers:

The Drummond Company, Inc., as the largest coal producer in Alabama, has a vital interest in the continued availability and use of the navigable waterways in Alabama. Our company's growth (and that of many others) and the economic viability of the Southeast has been positively impacted by the Warrior-Tombigbee System and the Port of Mobile. This must continue.

The company's new Shoal Creek Mine, now approaching its designed production level, has its principal shipping outlet at Mile Post 372 on the Black Warrior River. The success of this project (one of the newest and largest underground mines in the U.S.); our other existing mines and barge loading facilities now so heavily dependent on water transportation to be competitive; and the numerous associated jobs for Alabamians would be jeopardized absent the availability of an efficient, well maintained, and fully operational waterway system.

As you consider the funding needs of the Corps of Engineers, we strongly urge appropriation of at least $16.8 million for FY96 for the day to day Operation and Maintenance of the Warrior-Tombigbee system and to continue the needed improvements in the approaches to the bridges and Jackson and Naheola. We also support adequate O&M funding for Mobile Harbor. Lastly, and in addition to the above, we urge appropriation of an additional $4,650,000 for projects that have been deferred.

Sincerely,

James C. Ludwig

JCL/mc
JCL1-96

First Alabama Bank

First Alabama Bank
Mobile
Post Office Box 2527
Mobile, AL 36622-0001

Lawrence L. Merrihew
Vice President

February 7, 1996

Honorable John T. Myers, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
U. S. House of Representatives
2372 Rayburn House Building
Washington, D.C. 20515

Dear Mr. Myers:

The economies of Alabama and the U. S. Gulf Coast are greatly impacted by the Port of Mobile and the inland waterways serving these areas. The Black Warrior-Tombigbee Waterway, is also a vital factor in this respect. It serves manufacturing, mining, and the agricultural areas, as well as industrial production facilities in western Alabama. The waterway has served as an economic stimulant for over 100 years and receives periodic improvement, bringing it to the point today, that it is a modern system linking vital areas of the economy.

There are so many vital materials that are shipped on the Black Warrior-Tombigbee System, that its overall impact is sometimes not adequately considered. For instance, most of the coal exported from Mobile is shipped down this very waterway. Therefore, it is important for adequate operations and maintenance that the amount needed as requested by the Corps of Engineers for operations and maintenance, of $16.3 million, be appropriated for fiscal year 1997. This is a 3% decrease in last year's requested appropriation, and is 14% less than the comparable figure for fiscal year 1995. This level of funding is necessary to support the day-to-day O & M program, and to continue ongoing channel improvement projects that will maintain the waterway in its current state.

We urge your support of an appropriation of $16.3 million, in O & M funds for the Black Warrior-Tombigbee for fiscal year 1997. We also request support of the appropriation of adequate O & M funds for the Mobile harbor.

An efficient and reliable waterway system is important to all of us, and certainly is a justifiable investment by the federal government. The cost benefit ratio will be matched many times over by the local investment.

Respectfully yours,

Lawrence L. Merrihew
Vice President

LLM:lt

cc: Sheldon L. Morgan
Warrior-Tombigbee Development Assoc.

Gulf Power Company
500 Bayfront Parkway
Post Office Box 1151
Pensacola, FL 32520-0100
Telephone 904 444-6393

G. Edison "Ed" Holland, Jr.
Vice President – Power Generation/Transmission
and Corporate Counsel

the southern electric system

February 5, 1996

House Subcommittee on Appropriations
for Energy and Water Development
U.S. House of Representatives
Washington, D.C. 20515

Dear Representative Myers:

Gulf Power Company is an investor-owned electric utility and a subsidiary of The Southern Company; we serve 325,000 customers in Northwest Florida. Our Company utilizes coal for over 99 percent of its total generation requirements and consumes over 3,000,000 tons per year. Over 90 percent of our coal deliveries are dependent upon waterway transportation.

In the past, Gulf Power has moved millions of tons of coal on both the Tennessee-Tombigbee and the Black Warrior-Tombigbee Waterways or through the Port of Mobile. Currently, we are importing a major portion of our requirements through the Port of Mobile. This is expected to be an important option for us as we require lower sulfur coal in the future. Also, the flexibility of purchasing coal shipped on the Warrior-Tombigbee remains a major factor in our coal procurement program. Gulf Power depends on using these waterways, therefore, we totally support the need for adequate funding to properly maintain and improve operations.

In order to provide reliable electric service at the most economical cost to our customers, Gulf must continue to receive waterborne coal shipments. In addition to ensuring that adequate fuel supplies can be transported to our generating plants, the availability of waterway systems significantly contributes to future industrial growth in our service area.

We are in full support of the efforts of the Black Warrior -Tombigbee Development Association and ask that you give your full consideration to the testimony of the Association's President concerning the need for maintenance funding for the waterway system. We urge you to approve the Corps' operating and maintenance budget request for $16.3 million to maintain the Black Warrior-Tombigbee Waterway for fiscal year 1997. In addition to the requested O&M funds, the Corps of Engineers has deferred $4.6 million of projects over the past two years, these improvements are needed to bring the waterway efficiency to its expected level. We also support adequate funding for maintaining the Mobile Harbor.

We feel that it is not only in Gulf Power's interest to support the maintenance and improvement of these waterways, but also in the best interest of the customers of our service area and the nation. The capability to transport coal and other commodities via the Black Warrior-Tombigbee Waterway and the Port of Mobile is vital to the economy of our region.

Sincerely,

MLG/dr

Henry Marine Service, Inc.

'6840 Oyster Bay Road
Gulf Shores, Alabama 36542

(334) 968-8541
FAX (334) 968-8544

February 22, 1996

The Honorable John Myers, Chairman
House Subcommittee on Appropriations
For Energy & Water Development
U.S. House of Representatives
Washington. D.C. 20515

Dear Congressman Myers:

Henry Marine Service, Inc. highly supports the request for funding in order to keep the running of the Warrior-Tombigbee Waterway efficient and reliable.

Even though we are a relatively small company, sixty (60) employees, compared to larger companies such as Warrior and Gulf Navigation, the services we provide on the Warrior-Tombigbee Waterway are vital in the process of the delivery of coal to Mobile and beyond. We navigate the narrow waterways where the larger tugs cannot operate and upriver from bridges that are to low for these tugs to travel under.

We also have drydock and topside facilities in Mobile, repairing the barges and tugs that navigate up and down the Alabama waterways.

Without these waterways there would be no tugs, barges, coal, etc., therefore no jobs. Henry Marine Service depends on the waterways to provide jobs for our employees, thus providing homes, food, clothing, etc. for more than sixty (60) families from Mobile to Birmingham.

Thank you taking time to read this letter. I hope we can count on your support on this matter.

Sincerely,

Allen Henry

Allen Henry
President

AH:jk

Jim Walter resources, inc.

William Carr
President and
Chief Operating Officer

February 7, 1996

The Honorable John Myers, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Myers:

I would like to thank you for the opportunity to make a statement to your Subcommittee. Please accept this letter as my statement.

The Mining Division of Jim Walter Resources, Inc. currently mines 8 million clean tons of coal per year. Of that amount, nearly 60% of our production is exported. All of our export production goes through the Port of Mobile. Our payroll for 2,337 employees last year was in excess of $110,000,000 and taxes withheld and/or paid were in excess of $34,000,000. It is obvious from these facts and figures that this Company relies heavily on our waterways and port facilities and that they are of the utmost importance to this Company, its employees and the economy of the State of Alabama.

I strongly support the Corps of Engineers budget request for $16.3 Million in Operations and Maintenance funds for the Black Warrior-Tombigbee for FY 97. I also support the appropriation of adequate Operations and Maintenance funds for Mobile Harbor. Our waterways and port facilities provide economic prosperity to Alabama that is worthy of your support. Further, I support the statements and testimony to be given by Mr. Sheldon L. Morgan, President of the Warrior-Tombigbee Development Association. I believe that the value of improved efficiency and reliability of the Warrior-Tombigbee Waterway and Port of Mobile cannot and must not be underestimated.

P.O. Box 830079 • Birmingham, AL 35283-0079 • (205) 554-6150 • FAX (205) 554-6161

The Honorable John Myers
February 7, 1996

The world coal business is at its most competitive level in history. News of any problems, especially transportation and delivery problems, is quickly spread by other coal producers around the world to the buyers to discourage purchases here. A blemish on our delivery record can have devastating, long-term effects from which we might never fully recover. Buyers lost today may never return tomorrow.

Again, thank you for this opportunity to give my comments on this very important matter.

Yours very truly,

WC/kcl

Kimberly-Clark

Mobile Mill

Feb 19, 1996

The Honorable John Myers,
House Subcommittee on Appropriations
 for Energy & Water Development
U.S. House of Representatives
Washington D.C. 20515

Dear Representative Myers:

Kimberly-Clark (K-C), formerly Scott Paper, began operations in Alabama with the purchase of the Mobile Mill from Hollingsworth and Whitney in 1953. Including the acquisition cost, K-C has invested over $2 billion in the Mobile Plant and support operations. This investment represents an average annual capital investment of $50 million.

A significant factor in the approval of capital invested in Mobile is the cost of manufacturing pulp, which is approximately 50% wood cost. As you may well know, Kimberly-Clark's transportation system is responsible for transporting approximately 80% of the wood requirement to Mobile and is a significant component of the existing and long-term fiber procurement strategy.

For the past thirteen years, Kimberly-Clark has continuously utilized the Warrior-Tombigee Waterway, Coosa-Alabama River System, as well as the Port of Mobile. In 1983, the first year K-C shifted from truck and rail to river transportation, some 1.06 million tons of forest products were transported with two tug boats and forty barges. Due to the efficiencies and reliability of the Waterways, K-C will transport in excess of 3.5 million tons of forest products in 1996, 1.2 million of which is destined for export to International Markets. To sustain marine operations at this level requires over 20 tug boats, 150 barges and over 250 jobs directly related to operations and maintenance.

For K-C to operate on the Waterway requires operating expenses in excess of $13.2 million. These operating expenses are required to support a $28 million capital investment in wholly-owned woodyards and joint venture wood processing facilities.

With this investment in the Mobile operations and the dependence on the Waterways, it is paramount that the river channels, locks & dams, bridges and all other elements of navigation be adequately maintained, upgraded and funded to meet the existing and future demands of the waterways.

The proposed appropriation for FY 1997 Operations and Maintenance budget of $16.3 million is the minimum required to fund the planned channel maintenance programs. An additional $4.65 million is urgently needed to compensate for the last two years spending cuts which deferred/postponed planned projects. K-C fully supports the appropriation of these funds. In addition, K-C requests that the subcommittee

Kimberly-Clark Corporation

PO Box 2447 Mobile, A 36652-2447

appropriate adequate funding to support the operation and maintenance needs of the Mobile Harbor.

K-C in its entirety has been through significant changes in the last twelve months with the completion of the Kimberly-Clark and Scott merger. As a result, K-C has transitioned into a multi-billion dollar packaged products company strategically focused on diapers, personal care products, consumer tissue and away-from-home products. To continue to be the market leader, all facilities and operations throughout the world must remain competitive, from the procurement of raw materials to the satisfaction of each and every customer.

The Mobile operations have been and will continue to be leaders in the K-C world. To help insure a continued leadership position and a viable operation, future stability, and growth & development in all facets of manufacturing must continually improve. To remain a sound competitor in a highly competitive industry, it is imperative that the waterways continue to be adequately maintained and upgraded to meet the challenges tomorrow brings. The Warrior-Tombigbee and Coosa-Alabama River waterways are the "Main Artery" that supports the Mobile Mill and its employees. These waterways and ports will play a significant role in K-C's future business success.

With these considerations in mind, we ask that you give the requested budgets your full support.

Thank you for your help, time and consideration in this matter.

Sincerely,

J. M. DeCosmo

James M. DeCosmo
Manager of Lands, Research and Procurement
Southeast Timberlands

cc: Mr. S. C. Price - Kimberly-Clark, Mobile
Mr. A. D. White - Kimberly-Clark, Mobile

Kirby Corporation Inland Chemical Division
1775 ST. JAMES PLACE
HOUSTON, TEXAS 77056

P O BOX 1537
HOUSTON TEXAS 77251

OFFICE 713-622-5502
FAX 713 964 2280

February 20, 1996

The Honorable John Myers, Chairman
House Subcommittee on Energy & Water Development
United States Senate
Washington, D.C. 20510

Dear Chairman Myers:

This letter is sent to you on behalf of Kirby Corporation/Dixie Carriers, Inc. We are a major diversified water carrier that provides service to the public through the transportation of all types of bulk liquid and dry cargoes. We have 2,000 afloat and shore based employees. Our area of operations is the inland waterway system of the United States and the Gulf of Mexico. We have operated on the Warrior Tombigbee system for many years. Dixie is one of the largest users of the Tennessee-Tombigbee Waterway since its inception. Our major customers include the Monsanto plants at Decatur, Alabama, Amoco, and Novacor.

We join with President Sheldon Morgan of the Warrior-Tombigbee Development Association in urging your support of the U. S. Corps of Engineer's budget. We feel the additional funds are necessary to keep the system reliable and efficient.

I am aware that you face many hard decisions in seeking to balance the budget. Please remember that in 1988 this country experienced one of the worst droughts in history. The Mississippi River reached its lowest level in recorded history. Barging came to a virtual standstill on that waterway. During that critical time, Dixie Carriers was able to shift its tows that normally operate down the Mississippi River to the Warrior-Tombigbee system; thus preventing many of our mid-west customers from running out of product and closing down their plants. In the course of that one summer alone, it was calculated the economical savings paid for the entire Warrior-Tombigbee project. This country can not afford for this important waterway to deteriorate.

We appreciate your consideration of these budget requests that are of such vital importance to our company and industry.

Very truly yours,

Ronald C. Dansby
President, Inland Chemical Division

CC: Dennis Kirkonis
Sheldon Morgan

Midland

Midland Enterprises Inc.
300 Pike Street
Cincinnati, Ohio 45202
(513) 721-4000
(800) 950-2080 FAX

Peter E. Hubbard
Senior Vice President
Sales and Marketing

February 7, 1996

The Honorable John Myers, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
United States House of Representatives
Washington, D.C. 20515

Dear Congressman Myers:

I am writing to express my support for the continued maintenance and improvement of the Black Warrior-Tombigbee Waterway System.

Midland Enterprises Inc. is one of the nation's largest barge lines and is a major user of the Warrior-Tombigbee System. Last year we transported approximately 2,000,000 tons of commodities on this waterway, which is significant to the economies of the states in that region, from the points of view of both producers and consumers. Barging is a very low cost method of transportation, which translates into savings for the consumer, such as lower rates for electricity.

Another important aspect of the Warrior-Tombigbee System is that it provides the only alternative to the Mississippi River to move product to the Gulf Coast. This was extremely important during the drought year of 1988, when the lower portion of the Ohio River was closed for an extended period and the lower Mississippi River was severely restricted for approximately five months. The availability of the Warrior-Tombigbee System allowed us to continue to serve utility and industrial customers and kept those customers from having to shut down operations because they could not receive raw material.

Midland Enterprises Inc. fully supports and recommends appropriation of $16.3 million for operation and maintenance of the Black Warrior-Tombigbee System for FY96. Furthermore, we recommend additional funding to permit the Corps of Engineers to proceed with some of the projects that have been deferred over the past two years, which total $4,650,000. All of these funds are necessary to assure that the Warrior-Tombigbee System remains an important part of the Inland Waterway System.

Sincerely,

Peter E. Hubbard

Peter E. Hubbard

PEH/clw

MIDSTREAM FUEL SERVICE, INC.

TERMINAL
MOBILE HARBOR
TELEPHONE (334) 433-4972
MONITORING VHF CHANNEL 16

MAIN OFFICE
POST OFFICE BOX 2826
MOBILE, ALABAMA 36652
TELEPHONE (334) 433-4972
FAX (334) 432-8350

February 13, 1996

Hon. John Myers, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
U. S. House of Representatives
Washington, D.C. 20515

Dear Congressman Myers:

Midstream Fuel Service, Inc. enthusiastically supports the testimony to be presented to your committee on February 27, 1996 by Sheldon L. Morgan, President of the Warrior-Tombigbee Development Association, and Charles A. Haun, Chairman of the Warrior-Tombigbee Development Association. The testimony presented by these gentlemen represents the opinions and needs of those who depend on the Warrior-Tombigbee Waterway.

Midstream Fuel Service, Inc. is uniquely positioned to observe this waterway's many benefits. As a result of operating petroleum terminals, transporting petroleum products by tank barge, supplying petroleum products to the inland and international marine trade, operating support facilities for the petroleum exploration and production industry, and supply petroleum products to commercial, industrial and retail markets, Midstream is in constant contact with those whose lives and livelihood depend on, and are enhanced by, this waterway. The operation and maintenance funds appropriated by your committee are critical to the continued efficient operation of this vital waterway which serves so many recreational, commercial and industrial users.

This $16.3 million appropriation request for fiscal year 1997 is less than the fiscal year 1996 request. This reduction is due, not to a reduced operation and maintenance requirement, but as an acknowledgment of the budgetary pressures on this committee. Please give careful consideration also to the request for additional funds to complete projects deferred over the past two years.

The importance of the Mobile Harbor Operation and Maintenance budget cannot be overemphasized. This harbor serves the State of Alabama, the U. S. Gulf Coast, and shipping throughout the world. We, therefore, support adequate appropriation of operation and maintenance funds to keep the Mobile harbor operable.

This opportunity to present the needs of the Warrior-Tombigbee Waterway system and the Mobile harbor is very much appreciated. Thank you for the past and future support by this committee of our nation's waterways.

Very truly yours,

RA Guthans

R. A. Guthans
President

RAG/b

TTT/W-T.appro

Mobile *area* CHAMBER OF COMMERCE

Economic Development Department

February 7, 1996

The Honorable John Myers, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
U.S. House of Representatives
3272 Rayburn Street
House Office Building
Washington, D.C. 20515-1407

Dear Congressman Myers:

This statement is presented on behalf of the 2,400 business members of the Mobile Area Chamber of Commerce in support of the FY 1997 operations and maintenance budget request for new funding for the Warrior-Tombigbee Waterway.

Our support for the request of the Warrior-Tombigbee waterway is predicated on the fact that the cargo moving on the Warrior-Tombigbee Waterway supports the Port of Mobile and many area business. One example is the recent selection of Mobile for a $100 million iron ore processing plant with 75 new jobs. Only through our efficient transportation system and reliable waterways can these benefits to local businesses continue to be realized. The $16,300,000 request has been carefully reviewed and is a minimum figure to meet anticipated expenses and problems. We additionally support adequate funding for operations and maintenance of the Mobile Harbor.

Sincerely yours,

Dean Kelly

Dean Kelly
Vice Chairman, Maritime Affairs
Mobile Area Chamber of Commerce
(Atlantic Marine)

ac

pc: The Honorable H.L. "Sonny" Callahan

Monsanto

The Chemical Group
P O Box 2204
Decatur, Alabama 35609-2204
Phone (205) 552 2011

February 22,1996

The Honorable John Myers, Chairman
House Subcommittee on Appropriations
For Energy & Water Development
U.S. House of Representatives
Washington, D.C. 20515

Honorable John Myers:

Please accept this letter as Monsanto's support for Corp of Engineers 1997 appropriations request for operations, maintenance and projects for the Warrior Tombigbee Waterway system.

The Monsanto Company operates a manufacturing facility at Decatur, Alabama where it produces Acrylic fiber, Nylon Intermediates and Chem Coke products, of which some of the uses are clothing, blankets, yarn, upholstery and carpets. Monsanto ships annually in excess of 190 million pounds of chemicals via barge routed on the Tennessee Tombigbee and Warrior Tombigbee Waterway systems to Monsanto's Pensacola, Florida plant. Export Coke sales are trucked to Birmingport and barged via the Warrior Tombigee Waterway system to Mobile, where it is transloaded on a ship and moved to various foreign ports. Monsanto also receives inbound raw material chemicals from the Alvin, Texas area in excess of 750 million pounds annually. Normally this material is shipped by barge, which is routed via the Intercoastal Waterway, and Mississippi,Ohio,and Tennessee Rivers to Decatur, Alabama. The Warrior Tombigbee waterway system with its access to Tennessee Tombigbee Waterway system is the alternate route and has been used extensively for inbound material movement over the past several years.

Water transportation is economically favorable and accommodates the logistics for volume movements for Monsanto. Plans are in place to increase waterway usage as Plant production volumes increase.

Your efforts on behalf of the Warrior Tombigbee Waterway System are greatly appreciated by Monsanto.

Sincerely,
Dovell Haley/9DS
Dovell Haley
Supervisor, Shipping and Traffic

NAVIOS
SHIP
AGENCIES INC.

PHONE (504) 469-0731
CABLE NAVAGENT
NEW ORLEANS

120 MALLARD STREET SUITE 210
ST ROSE, LOUISIANA 70087

TELEX 78-49 57
FAX 504-467 2877

February 6, 1996

The Honorable John Myers, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
U.S. House of Representatives
2362 Rayburn House Office Building
Washington, D.C. 20515

RE: **The Warrior-Tombigbee**
FY/97 U.S. Army Corps of Engineers Budget

Dear Representative Myers:

We request that you support the U.S. Army Corps of Engineers' Operations and Maintenance Budget of $20,650,000. for the Warrior-Tombigbee Rivers.

Our vessels and our principal's vessels carry 2.9 million tons of iron ore and 1.8 million tons of furnace coke per year with the majority bound for industries in the State of Alabama. The Port's ability to maintain its present draft has enabled us to remain competitive on the world market. The continued dredging of the Warrior-Tombigbee allows this cargo to go through the waterway system of the Tombigbee. The U.S. Army Corps of Engineers has done an outstanding job maintaining this system.

A large portion of this cargo is for steel operating in the Birmingham, Alabama area. These import raw materials enable the steel mills to supply steel for various supplies to this nation. Some of these cargo products from the steel mills are re-exported through the Port of Mobile, which helps to reduce our trade imbalance. The efficiency and reliability of waterways commerce is essential for us to provide the raw materials necessary for our principals to meet the demands of the various markets within the State of Alabama and the United States.

We have been in operation since 1957 utilizing the Port of Mobile, the Warrior-Tombigbee and the Black River systems, and we realize the importance of tight budget control, yet the benefits on industry, commerce and trade as well as job return must be recognized. Therefore, we solicit your support and we join in the collective efforts of all those affiliated companies who realize the importance of maintaining this waterway system so that we may continue to bring in the necessary raw materials for our manufacturing industries within the State of Alabama. For these reasons, we request you to support the $20,650,000 for the Operations and Maintenance programs for FY/97.

Yours very truly,

NAVIOS SHIP AGENCIES, INC.

George E. Duffy
President

GED/ckh

Parker Towing Company, Inc.

February 5, 1996

The Honorable John Myers, Chairman
House Subcommittee on Appropriations For Energy & Water Development
United States House Of Representatives
Washington, DC. 20515

Dear Chairman Myers:

My name is Charles A. Haun and I am Executive Vice President for Parker Towing Company of Tuscaloosa, Alabama.

We are a full service marine transportation company operating a fleet of boats and barges and several ports on the southern portion of the U. S. Inland Waterways System. We are involved in the transportation of all types of commodities including coal, stone, wood products, steel, salt, manufactured products, chemicals, and oil. We have been in operation for over fifty years.

Parker Towing Company endorses and supports fully the efforts of the Warrior-Tombigbee Development Association to improve the overall operation of this vital waterway system. The Warrior-Tombigbee System and the Port of Mobile are of great importance to our company and the industries we serve. Proper and adequate funding of the waterway project will ensure that more industries can rely on this energy efficient delivery system. The regions' employment and economic well-being could be adversely affected to a great degree should the efficiency of the waterway be degraded.

As a member of the Warrior-Tombigbee Development Association, Parker Towing Company emphatically supports an appropriation of $16.3 million for the Corps of Engineers for operation and maintenance of the Warrior-Tombigbee System for fiscal year 1997 and additional capability funding of $4.6 million for a total of $20,965,000. In addition, we support the Corps' request for operation and maintenance funds for Mobile Harbor.

Sincerely,

Charles A. Haun
Executive Vice President

P. O. Box 020908 • Tuscaloosa, Alabama 35402-0908 • 205-349-1677 • FAX 205-758-0061

Ryan-Walsh, Inc.

Port of Mobile
Alabama State Docks
Admin. Bldg., Suite 208 (36602)
Post Office Box 2188 (36652)
Mobile, Alabama
(334) 439-7759
Fax (334) 439-7754

February 21, 1996

The Honorable John Myers, Chairman
House Subcommittee on Appropriations
For Energy & Water Development
United States House of Representatives
Washington, DC 20515

Dear Sir:

SSA/Ryan-Walsh is a stevedoring company that handles approximately 1.7 million tons of forestry products and 1.5 million tons of bulk cargo (coal) through the Port of Mobile on an annual basis. We directly employ forty-five (45) people which generates approximately 1.5 million dollars in salaries and additionally support 300,000 man-hours for four (4) Local ILA unions.

The Warrior-Tombigbee Waterway is a significant factor in maintaining our base business as well as for future economic development. We totally support the collective effort to improve the efficiency and reliability or the Warrior-Tombigbee. The cost efficiency of the waterway is a vital factor in the transportation inter-structure for the Port of Mobile.

Currently, the coal (1.5 million tons) that we handle through the McDuffie coal facility is totally dependent on the waterway. Consequently, if the waterway is degraded, it would cause significant reductions in the efficient handling of that cargo. It is our position the appropriation of 16.3 million dollars in O & M funds is imperative and deferred projects (totaling $4,650,000) should be a critical priority in ultimately bringing the waterway's efficiency to a level that insures future expansion and growth.

An associated issue, which is also one of serious concern to our firm, is the funding to maintain our harbor. We would submit and strongly stress that adequate O & M funds for Mobile harbor are certainly as crucial to the transportation equation for the Port of Mobile and our area's economy.

We very respectfully appreciate your consideration of this matter. As always, at your service.

Sincerely,
Ryan-Walsh, Inc.

James H. Darnley
Regional Vice President

JHD/dy

A Stevedoring Services of America Company
Partners in Quality

SAUNDERS

February 13, 1996

The Honorable John Myers, Chairman
U.S. House Subcommittee on Appropriations
For Energy & Water Development
Washington, D.C. 20515

Dear Congressman Myers,

The navigable waterways and associated transportation system in the State of Alabama is mature, economical, and successful. In the broadest sense, I ask your support for the appropriate funding for Operation and Maintenance of the Warrior-Tombigbee River system and of Mobile Harbor, because it is a solid infrastructure investment by any measure.

Our system is a rare and valuable link of the international ocean Port of Mobile with a vast inland river network through the Warrior-Tombigbee River and the Tennessee-Tombigbee Waterway. This enormous system has strategic and economic importance at every level of consideration--national, state, and local.

Saunders Engine Company at Mobile and Tuscaloosa, Alabama is a member of a large number of firms along the system who are service providers to the vessel and barge operators in Alabama's international port and on our the river system.

Our company has been part of the maritime community headquartered at Mobile for 37 years. We have over seventy employees who are primarily engaged in this service and we are only part of a network of fuelers, repairers, and suppliers who maintain the large fleet of ships, towboats, barges, and cranes that are utilized in the total system from ocean port to inland terminals.

We ask for your full support of the Corps of Engineer's budget request for Operations and Maintenance in FY '97. This request for the Warrior-Tombigbee is expected to be level with 1996 and is in the range of $16.3 million. Also, we ask your support to fund in FY '97 certain specific maintenance projects which are critical to the efficient operation of the waterway, but which have been deferred in the past two years--these total $4.65 million.

Thank you for your consideration.

Sincerely,

Andrew A. Saunders, Jr.
Chairman, CEO
Saunders Engine Co., Inc.

Member, Executive Committee
Warrior-Tombigbee Association

Chairman-Elect
Mobile Area
Chamber of Commerce

aunders Engine Company

☐ **Mobile, AL**
840 Dumaine Road 36610
P.O Box 1824 36633
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Fax 334 457-5563

☐ **Panama City, FL**
1128 Chestnut Avenue 32401
P O Box 1387 32402
Bus 904 763-7656
Fax 904 784-0265

☐ **Tuscaloosa, AL**
6402 Highway 69 S 35405
P.O Box 70393 35407
Bus 205 759-1222
Fax 205 759-1296

Southern Company Services Inc
Post Office Box 2625
Birmingham Alabama 35202
Telephone (205) 870 6227

Jerry L. Stewart
Vice President

the southern electric system

February 13, 1996

The Honorable John Myers, Chairman
House Subcommittee on Appropriations
for Energy & water Development
U. S. House of Representatives
Washington, D. C. 20515

Dear Congressman Myers:

On behalf of Alabama Power Company, Gulf Power Company, and Mississippi Power Company, I am writing to express our support for the Warrior-Tombigbee Development Association and its president in their efforts before your committee. Because of the importance of the Warrior-Tombigbee Waterway to local, national, and international trade, the Southern electric system joins with the Warrior-Tombigbee Development Association in an effort to improve the efficiency and reliability of the Warrior-Tombigbee Waterway.

For the past twenty-nine years, Alabama Power Company, Gulf Power Company, and Mississippi Power Company have used the Warrior-Tombigbee to transport coal to their respective electrical generating plants at Demopolis, Alabama; Mobile, Alabama; Pensacola, Florida; Sneads, Florida and Biloxi, Mississippi. In 1995, through the use of contracted barge carriers, these companies moved over **4.7 million** tons of coal by way of the Warrior-Tombigbee Waterway. All of this coal would have required a longer move down the Mississippi River through New Orleans. The Warrior-Tombigbee Waterway allows the barges to move down the Warrior-Tombigbee River to Mobile and other destinations. The significant importance of this capability to our system is obvious from a transportation flexibility standpoint. Additionally, the Port of Mobile is the hub of the Central Gulf Coast and the continued development of its facilities and support services is critical to the economy of the tri-state area served by the Southern electric system.

Alabama Power Company, Gulf Power Company, and Mississippi Power Company utilize water transportation because of the economic advantage to our millions of customers. Any expenditures for maintenance or upgrading which improve the efficiency and reliability of the waterway will have a positive impact on our customers. At the same time, higher cost resulting from inefficiency or the unreliability of the Warrior-Tombigbee Waterway will have a direct and adverse effect upon our customers.

The Honorable John Myers
February 13, 1996
Page Two

It is imperative that there be a continuous program for maintenance and upgrading of the Warrior-Tombigbee Waterway channels and locks. We support the proposed budget request for $16.3 million in Operations and Maintenance funds for the Black Warrior-Tombigbee River for the fiscal year 1997. Additionally, we support the earliest completion of the capital proejcts that have been deferred over the past two years as well as the request for O&M amounts for Mobile Harbor.

Adequate funding of programs required to maintain the efficiency and reliability of our nation's waterways is critical to its superior economic health and welfare. I strongly urge and solicit your support.

Sincerely,

ch

cc: Alabama Power Company
W. Kenneth Mooney

Gulf Power Company
Jerry L .Mintz

Mississippi Power Company
Craig A. Leasure

City of Tuscaloosa

COUNCIL
SAMMY WATSON
President Pro Tem
District 5
ODESSA WARRICK
District 1
HARRISON L. TAYLOR
District 2

POST OFFICE BOX 2089
TUSCALOOSA, ALABAMA 35403
205/349-2010

Fax 205/349-0147

ALVIN P. DuPONT
Mayor

COUNCIL
JERRY PLOTT
District 3
GARY L. PHILLIPS
District 4
JACK KUBISZYN
District 6
SARAH S McBROOM
District 7

January 29, 1996

Honorable John Myers, Chairman
House Subcommittee on Appropriations for
Energy & Water Development
United States House of Representatives
Washington, D.C. 20515

Dear Representative Myers:

I am asking that you support the appropriation of $16.3 million for the U.S. Army Corps of Engineer's FY '97 operation and maintenance of the Warrior-Tombigbee Waterway and Mobile Harbor. I understand that this is the amount in the present budget, which was reduced by 3% from last year; and therefore is at minimum level. Please do not reduce this amount.

I also understand that the Corps has the additional capability to get underway on projects totalling $4,650,000 which have been deferred over the past years. These projects are vital to continuing the improvements year to year which ultimately will bring the waterway efficiency to an expected level. I appeal to you to support these projects as well.

I am certain that the availability of water transportation is critical to our area's manufacturing development. It is therefore important that the river system remain navigable and that projects to upgrade the system be funded and completed.

Sincerely,

al P DuPont

Alvin P. DuPont
Mayor

APD/tb

U. S. Steel
Fairfield Works
P.O. Box 599
Fairfield, AL 35064

Edward R. Caine
General Manager

February 14, 1996

The Honorable John Myers, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
U. S. House of Representatives
Washington, DC 20515

Dear Congressman Myers:

U.S.X. Corporation operations (both steel and mining) rely heavily upon the availability of Alabama's river systems to transport iron ore, coke and finished steel products. The availability of a commercially viable river transport system permits U.S.X. to be competitive both domestically and internationally.

Our plans call for moving up to 5.5 million tons per year of material over the Warrior-Tombigbee Waterway System during the coming years.

It is for this reason that we offer our support for the Corp of Engineers in their request for operation and maintenance funds for fiscal year 1997. We feel the Warrior-Tombigbee Waterway System is vital to the continued growth of Alabama.

We support the action of the Warrior-Tombigbee Development Association in their efforts to assist the Corp of Engineers.

Very truly yours,

E.R. Caine

E. R. Caine
General Manager

U. S. Steel Group
A division of USX Corporation

70th Anniversary

DAVID
VOLKERT
& ASSOCIATES, INC.

Engineers • Architects • Planners

February 20, 1996

The Honorable John Myers, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
U.S. House of Representatives
Washington, D.C. 20515

Dear Congressman Myers:

David Volkert & Associates, Inc. (Volkert) is an engineering/architectural/planning firm which employs 375 people and maintains Alabama offices in Mobile, Birmingham, and Gulf Shores. Volkert strongly supports funding for the Corps of Engineers for the Warrior-Tombigbee Waterway and the Port of Mobile for FY97.

We believe the proposed $16.3 million for Operations and Maintenance funds for the Black Warrior-Tombigbee is justified since this amount is necessary to cover the known and reasonably expected needs for FY97, support the day-to-day O&M program, and continue on-going channel improvement projects. We also support an additional $4,650,000 needed by the Corps to continue the improvements year to year which ultimately will bring the waterway efficiency to an expected level.

Since the City of Mobile's largest industry is her Port and the City's economy depends upon her Port, Volkert also supports funding for O&M for Mobile Harbor.

Confidence in the Waterway and its efficiency and modernization are important in bringing much needed new industry to Mobile and to the State of Alabama. Lower operating costs to users of the Waterway and Port of Mobile are essential in obtaining a reasonable balance of the international export market allowing the U.S. to reduce our trade deficit. Increases in shipping and commerce result in opportunities for many companies, similar to Volkert, to obtain business and offer meaningful employment to citizens of the State of Alabama and other parts of the U.S.

Volkert appreciates this opportunity to express our support of Chairman Charles A. Haun and President Sheldon L. Morgan, of the Black Warrior-Tombigbee Development Association, and the testimony to be given by them before the Appropriations Committee of the Senate and House. We are proud to join in the collective effort to improve the efficiency and reliability of the Black Warrior-Tombigbee Waterway and the Port of Mobile.

Sincerely,

TKeith King

T. Keith King, P.E.
President and CEO

P. O. Box 7434 • Mobile, AL 36670 • 3809 Moffett Road 36618 • (334) 342-1070 • Fax (334) 342-7962

Birmingham, AL Gulf Shores, AL Metropolitan Washington, D.C. Ft. Walton Beach, FL Miami, FL Tampa, FL New Orleans, LA

Warrior & Gulf Navigation Company
P. O. Box 11397
Chickasaw, Alabama 36671

February 23, 1996

The Honorable John Myers, Chairman
House Subcommittee on Appropriations for
Energy & Water Development
United States House of Representatives
Washington DC 20510

Dear Mr. Chairman:

I am Adolph N. Ojard, President of Warrior & Gulf Navigation Company. Our company is an active member of the Warrior-Tombigbee Development Association and wholly supports the testimony to be presented by Mr. Sheldon Morgan as President of the Association. I wish to take this opportunity to highlight the impact that the Black Warrior-Tombigbee Waterway and the Port of Mobile has to the success and development of our Company.

Warrior & Gulf is a barge line and terminal operator headquartered in Chickasaw, Alabama, and owns 22 towboats and 240 barges, moving approximately 9 million tons of bulk materials on the Black Warrior-Tombigbee River System, making WGN the dominant water carrier operating in the region. Additionally, we own and operate two (2) bulk and general cargo terminals at Port Birmingham and Mobile, Alabama, providing storage, transloading and intermodal services for truck, rail and water transportation. Our total employment is 235 people

Warrior & Gulf has provided barge transportation on the Black Warrior-Tombigbee River Systems since 1940 for export and domestic coal, iron ore, coke, import and export steel products, export and domestic wood chips, and several other types of bulk commodities. An efficient and properly maintained waterway system integrated with the Port of Mobile is vital to Warrior & Gulf and its customers. This waterway system has made the entire region world competitors through the reliable, efficient movement of raw materials and finished products both for domestic and overseas consumption. In order to encourage continued economic development along this great waterway we must continue in our efforts to ensure this viable low cost transportation alternative remains in place The continued efficiency of this waterway is extremely critical to the viability of the industries it services and develops. This waterway system and harbor hold great opportunity for developing trade initiatives with Mexico and South America.

MEMBER
AMERICAN WATERWAYS OPERATORS

Transtar
Company

The Honorable John Myers
February 23, 1996
Page Two

Historically, our shoaling problems vary greatly from year to year dependent upon the length of our high water season (December - April) and the amount of flooding that occurs. The Operations & Maintenance budget has been typically $18 - 20 million including monies to maintain ongoing channel improvements which are important to the continued safety and efficiency of the waterway system.

We have worked closely with the Corps of Engineers and wholeheartedly endorse their budget request of $16.3 million in O & M funds for the Black Warrior-Tombigbee system for FY '97. However, we understand the Corps has the additional capability to get underway on those projects which have been deferred over the past two years and hope the Corps will proceed accordingly. Additionally, our company supports the appropriation of adequate O & M funds for Mobile Harbor.

We respectfully request your continued support and assistance as your subcommittee considers appropriation of funds for these very important issues concerning the Black Warrior-Tombigbee System, the Port of Mobile and those they serve.

Very truly yours,

Adolph N. Ojard

ADOLPH N. OJARD
President

Mr. MORGAN. To explain a little for the record as to how this system is designed, the streams north of Birmingham, Alabama, and northwest of Birmingham, come to form what is known as the Black Warrior River, which flows down the State to Demopolis, Alabama, which joins the Tombigbee, and from there on to Mobile. And it flows through the industrial areas, through agriculture and forestry and through—of course, on the headwaters there is a lot of mining activity, as you know—some of the major coalfields of the Nation.

This has brought about the development and expansion of facilities in the Port of Mobile of the Alabama City Docks, which will be addressed a little later by a representative of the State docks.

The system had its beginning formally in the 1870s when 17 locks and dams were constructed between 1870 and 1915. They, of course, became outmoded during World War I, and on through the Depression era and then World War II. But an effort was begun in 1950 to try to replace these 17 locks and dams, and that took a lot of time to move goods and barges through the waterway locking 17 different times.

In the 1950s our association was formed and the leadership in the State went to work, and through this association coming together, went to work, working with the Alabama congressional delegation, were able to complete five of the new locks and dams and replace the old ones. That left one lock and dam. And from 1975 until 1992, we have tried to replace that one lock and dam, the Oliver.

And through the 1986 Water Resources Act, if you will remember, the Oliver was the first project coming out of that inland waterway trust fund, thanks to you, Mr. Chairman. It was the first coming out and the first constructed. And it was completed in 1992, and it is now working efficiently, and the system now is complete. It is a fine example of a partnership between private industry, civic leaders and this committee, and I think it is one of the best examples of the multipurpose water system developments in the Nation.

So thanks to you for your support and cooperation the activities on this waterway continued to grow, the steel mill production in Birmingham, other industrial investments in Mobile and along the way at Jackson, Alabama, and Demopolis and others, and Tuscaloosa. So it has continued to increase. The original projections have been far surpassed, and today, in 1995, we should be near 25 million tons moving on that waterway. So it is a very vital system and is very active.

I would like to continue to say that our organization is a broad-based system association made up of industrialists, barge operators, shippers, major corporations, electric utilities, cities and counties, along the waterway. The Northport delegation is here today as a member of our association, and I want to go on record that we support their request for this flood control project as much needed. The City of Tuscaloosa is a member of our association and the City of Mobile. So we have a broad-based membership in the association.

We appreciate the support that this program has given to the civil works, and this committee has given to the Civil Works program on the Black Warrior-Tombigbee. And this year we have a little different situation in that the Corps of Engineers, the administration, has not told, has not revealed their budget. We are kind of flying blind, and we are going to tell you what our needs are.

Our needs are a little more than what probably is going to come to you from the Corps, not knowing what they are going to ask for, because over the last couple of years we have had several major O&M projects on our system deferred. The railroad bridge at Jackson, Alabama that was in the budget last year has been deferred; Morgan Sales at Demopolis and Oliver Locks have been deferred, our upland disposal sites have been deferred, and those were projects—the upland disposal, in my opinion, is one of the most important elements of this development because it is going to get the sand out of the river on the sites upland and reduce dredging costs in the future. That is very important. If you want to reduce O&M, we need to continue this program. And as we know, they are looking for ways to reduce the O&M budget, and that is a real concern of ours.

Finally, our association is asking that the operation and maintenance funding for 1997 to the Corps of Engineers for the operation and maintenance of the Black Warrior-Tombigbee system be $20,965,000. Now, we estimate that to catch up is about $4,650,000, and then put with the $16,300,000, which is pretty much level funding from last year. So that is what we are asking for, a total of $20,965,000.

So we appreciate your attention to this, and we respectfully ask for your support of these needed funds to continue the efficient maintenance and operation of a very huge investment already. Not only by the government, but even more so by the private sector.

Thank you very much, Mr. Chairman. We are going to miss both of you. We thank you for coming to Mobile often, and we hope to see you again before you all leave the Congress.

[The statement of Mr. Morgan follows:]

STATEMENT FOR
SUBCOMMITTEES ON ENERGY & WATER DEVELOPMENT
UNITED STATES HOUSE OF REPRESENTATIVES

I am Sheldon L. Morgan, President of the Warrior-Tombigbee Development Association. Our members represent a broad cross-section of shippers, carriers, and the general business community in the Warrior-Tombigbee basin in Alabama, and nearly a dozen other states. The Association began in 1949 to work for the redevelopment of the Warrior-Tombigbee Waterway System. Construction of its original 17 locks and dams began in the late 1870's, and completed in 1915. The navigation system provided by these locks and dams had gradually deteriorated and, following World War II, the annual tonnage had leveled off at 2.5 million tons, due to the condition and limited capacity of the obsolete locks. The Association began in 1950 to work with Alabama's Congressional Delegation and the Army Corps of Engineers to plan for modernization. Five new locks were built between 1954 and 1975. The last remaining old structure (Oliver Lock and Dam) was replaced in 1991 - the first under the Water Resource Development Act of 1986. The Warrior-Tombigbee Waterway now has modern and standard sized locks throughout its length. These six new locks replaced the 17 old, turn-of-the-century locks, and today, this system represents a most noteworthy example of the positive impact of the water resource development program. The most persuasive evidence of the validity of this project and the wisdom of those who made it possible comes from the record compiled during and following the investment in its redevelopment. During the economic studies which justified these investments, it was projected that by 1980, the Waterway would carry some eight million tons annually, producing a positive benefit to cost ratio. These levels were reached in 1966 and, by 1980, twice the projected tonnage was being moved. Traffic has since reached 24 million tons annually, a level three times that which had been projected. Clearly this has been a valid investment in infrastructure.

Subsequently, due in large part to the federal investment in this waterway, several billion dollars have been invested by industry, agriculture and other non-Federal agencies, providing thousands of jobs. For example, the Alabama State Docks, as a result of a $300 + million expansion program, now offers the most advanced export coal handling technology available in this country, along with similar improvements for handling grain, bulk materials, steel and forest products. It is interesting to note that the investment by this one local agency exceeds the total Federal investment in building all the locks and dams on the entire waterway, including the new Oliver Lock. We are asking for the continuation of federal investments which have paid off many fold. The coal handling facility is being further expanded at this time, representing an additional $14 million investment.

This Waterway must continue to be efficient and reliable if its users are to remain competitive in world markets. Shipments of ore, steel, and related products have increased because of the new and modern U. S. Steel facilities, and a new mill at Tuscaloosa which is already being expanded. The efficiency and modernization of the waterway have been important factors in U. S. Steel's continuing investments to modernize its Fairfield mill. Fairfield is now again one of the bright stars in the USX crown. Recent investments substantially exceed $1 billion. The new Tuscaloosa steel mill surpassed $100 million in initial investment, and an additional $154 million is now underway. This mill utilizes the river southbound for export, as well as northbound for raw materials and domestic sales of finished product. Hence there is a favorable impact on the balance of payments which will be further enhanced by the current expansion. Recently, British Steel announced a $100 million project at Mobile to ship production on the Black Warrior-Tombigbee to Tuscaloosa.

Major facilities for mining interests, forest products and marine equipment account for well over another $1.5 billion in recent investment. A new underground coal mine alongside the Warrior River has begun operation with a planned annual production rate of some four million tons. This will be among the largest underground mines in the United States. It is a world class facility and its low sulphur coal will move through an adjoining barge loading facility. There are new facilities at the Port of Mobile, which handle more forest products than the total handled by all other Gulf Coast ports. The efficiency and reliability of the waterway are key factors in the development and competitiveness of these facilities, upon which thousands of jobs depend.

These are but examples of how this waterway is so central to the economy of this entire area, impacting both domestic and international markets. Attached with this statement are letters further highlighting this importance. These represent a broad cross-section of the economic heartbeat of an entire region. Throughout these statements you will find repeated references to the importance of confidence in the waterway to the willingness of business and industry to continue to invest in our area and of their customers to depend on its reliability for the movement of their products. Please note the wide range of interests represented by these statements: financial institutions; public utilities; port facilities; coal mining, both deep and surface; manufacturers; suppliers; marine interests; and general business.

We are hopeful the President's recommendation for O&M funds plus some add-ons for additional capability be provided for the Warrior-Tombigbee Waterway. This would be realistic funding which we will support as absolutely essential to day to day activities of the O&M program, and with good management it will allow for the continuation of several on-going projects which are near the point of culmination, following several years of investigation, design and now beginning the actual work. These projects address long-standing problems and have required extensive research and coordination and reflect excellent teamwork by the Corps and the industry. But for the support of this committee, they would not be nearing reality. I wish to emphasize that this level of funding is the minimum essential level.

Mr. Chairman, realizing you and our dear friend, Mr. Bevill, have stated this is your last hearing for us, we must say it has been a labor of love. Industry and the Corps of Engineers in the Mobile District have developed a true partnership and enjoy the finest of professional and mutually supportive relationships. From this have come both short and long range programs which have provided a basis for orderly progress toward keeping the Waterway efficient and reliable. The funding requirements to which I have referred stem from work we need to continue now under these programs. I respectfully repeat that the performance of this waterway in successfully handling a level of tonnage some three times the projections made during its design, attest to your foresight and support. None of our projects could have come to fruition without the staunch support of this committee and its leadership.

To summarize and close our testimony, the Warrior-Tombigbee Waterway is a classic example of the positive aspects of the Civil Works Program. The Congress has seen its potential and has supported its development. And now the project continues to demonstrate its worth. Investment and expansion continue locally.

During the severe drought in 1988, this waterway operated normally and with the Tennessee-Tombigbee connection provided an alternate route for cargo unable to move otherwise. There are large, national carriers now operating regularly on the Warrior-Tombigbee and Tennessee-Tombigbee as a result of their 1988 experience.

This appeal by the Warrior-Tombigbee Development Association for funding Operations and Maintenance of the Black Warrior-Tombigbee Waterway System by the Congress for FY97 is being made without knowledge of the President's budget recommendations. Normally, the Administration's budget will have been presented by the time the Subcommittee holds its hearings for public testimony. Since this is not the case, it is necessary to consider the historical records of the Corps of Engineers in maintaining navigation in past years as well as the important infrastructure projects which have been deferred for one reason or another. Those projects deferred are elements of a long range strategic plan by this Association and the Corps developed over time to improve the efficiency and safety of the Waterway.

The Warrior-Tombigbee Development Association request for Operations & Maintenance funding in FY97 for the Black Warrior-Tombigbee Waterway in the amount of $16.3 million. This is 3% under level funding (an administration goal) for the normal O & M work, this should keep navigation capability at a minimum level. However, additional capability of the Corps is important to the continuing improvements that have been deferred. Unfortunately, we did not request additional capability last year. Those include upland disposal sites, mooring cells, certain equipment at locks and other vital improvements totaling $4.6 million. Therefore, our request is for a total of $20,965,000 for FY97.

Mr. MYERS. Thank you.

Mr. BEVILL. Thank you, Sheldon. You have done a great job. Your leadership has been so important to this very important waterway.

Actually, I guess without any question this waterway, the Warrior-Tombigbee, transports more coal by far than probably any waterway in the United States other than the Mississippi River; wouldn't that be a fair statement?

Mr. MORGAN. And the Ohio.

Mr. BEVILL. And the Ohio, I see. It is very critical to our economy in that part of the country, and we appreciate the leadership you have shown all these years.

And, Charles, I hope you will give my regards to Tim——

Mr. HAUN. I will.

Mr. BEVILL [continuing]. Who you work with.

So thank you very much.

TUESDAY, FEBRUARY 27, 1996.

TENNESSEE-TOMBIGBEE WATERWAY

WITNESS

DONALD G. WALDON, ADMINISTRATOR, TENNESSEE-TOMBIGBEE WATERWAY DEVELOPMENT AUTHORITY

Mr. BEVILL. Next we have our friend Don Waldon, Administrator, of the Tennessee-Tombigbee Waterway.

And, Don, we will be glad to hear from you.

And, Frank, we are glad to have you with us, and each of you there.

So you may proceed as you wish.

Mr. WALDON. Good morning, Mr. Bevill, Chairman Myers.

Since this is most likely the last time we will be appearing before you, Mr. Bevill, as a Member of this committee, I have asked two friends of yours and colleagues of mine on the development of the Tennessee-Tombigbee to join me, just to sit up here, Frank Glass from TVA, and also Walter Stevens, who heads up the Office of Water Resources in the State of Alabama.

Mr. BEVILL. Yes.

And, Walter, we appreciate the good job you are doing and what you are doing for our waterways in Alabama and your leadership, and, of course, Frank has been, I know he has been one of your right hands, if not the right hand, on the Tennessee development of the Tennessee-Tombigbee. So we are pleased to have each of you.

Mr. WALDON. In the interest of time, I will just summarize my statement. But I am sure that everyone who will testify this year will share a degree of melancholy, if not trepidation that I have today, knowing this is most likely the last time that I will have the opportunity and pleasure to appear before you.

I think without question, you two gentlemen have been the driving force behind the development of the Nation's resources, certainly for the last 25 years, if not for the past 30, and it is going to be very difficult for all of us really to comprehend the future of this very important Federal program without your leadership and support.

There is probably never a project built during the time that you gentlemen have been sitting on this committee that was certainly more dependent upon the support and leadership of and influence of you two gentlemen than the Tennessee-Tombigbee. I think without question had it not been for your involvement and support, I would not be here talking about the benefits of the project. We would still be talking about it as a dream and not a reality.

I am pleased to report that the waterway continues to grow, the benefits of it. As Mr. Bevill indicated just a moment ago or earlier today, we had a record, another record year on commerce. Commerce increased by a million tons.

We are also pleased to announce the waterway has attracted some $2.5 billion of new and expanded industry since the waterway opened. In the waterway corridor last year alone over $700 million of new manufacturing and industrial expansion, which obviously creates jobs for the region and for the Nation. The West Alabama University completed a study last year, in essence, commemorating the tenth year the waterway has been open, they surveyed as many users as we could identify of the waterway.

It is hard to believe, isn't it, Chairman Myers, 10 years?

Mr. MYERS. Doesn't seem possible.

Mr. WALDON. I know it. But we found that while we were able to keep up with the commerce and the visitors, we did not have a good handle on the number of jobs this waterway has helped create. West Alabama University surveyed all of the users that could be identified. Obviously, we missed some. We only got a 60 percent response to the survey, but incredibly based on that research, the Tennessee-Tombigbee has helped to create 42,000 jobs and an annual payroll of $1.1 billion. As far as we are concerned, that is the success story of this waterway and the payoff from your efforts and everything.

Recreation and tourism, thanks to the funds that you provided for in the bill for some basic recreational facilities along that waterway, and in cooperation with private investments, there has been over 2.5 million visitor days of recreational use. That activity alone generates $170 million of economic spending within the waterway corridor and the region.

Mr. WALDON. We are confident that the Tenn-Tom's benefits will continue to increase in the future as the region's economy and the Nation's economy grows and also as long as the Corps of Engineers properly operates and maintains the waterway.

You gentlemen have been as equally supportive in the operation of the project as you were in development of it. However, I regret to inform you that we do have a growing problem on the Tenn-Tom and this may be indicative of a lot of projects that have been in operation for some time. We were surprised to learn that we have $5.4 million of deferred maintenance, maintenance that was scheduled but because of lack of funding has been indefinitely deferred.

I know you would agree that it would be penny wise and pound foolish not to provide sufficient funds to properly operate a project of the size and investment that you gentlemen and the Federal Government have made in the Tenn-Tom. We know that you are faced with a lot of budgetary constraints. We are not asking that you add enough funds to completely do all of that deferred maintenance this year, but we need to make sure that we don't have a continuing deferred operation and maintenance level that is growing like Topsy because, as the old Fram oil filter ad says, you pay me now, you pay me later. Some of these projects we are getting into major rehabilitation because sufficient funds weren't allowed to maintain the project as needed.

We are requesting that you approve the current level of funding for next year and an additional $3.7 million to do some of the more pressing work of the $5.4 million that has been deferred.

There are two other projects very important to the commercial user of the Tenn-Tom. We are requesting $3 million to continue the engineering design work of the new proposed lock at Kentucky Dam. Most all of the traffic that flows on the Tenn-Tom utilizes that system. That lock has been there 50 years and there is like five hours of average delays just to transit that lock.

The Warrior-Tombigbee Association also recommended that funds be provided for some mooring sales at Coffeeville. We join them in that request.

I would be remiss not to express our appreciation for your strong support of the Appalachian Regional Commission and the Tennessee Valley Authority and particularly last year when these two programs were threatened. These two agencies provide invaluable services and assistance to one of the most economically depressed regions in the Nation. While considerable progress has been made in this region, this region lags far behind as far as per capita income and standards of living enjoyed elsewhere in the Nation. We recommend that these programs be funded at the maximum levels possible given the budgetary constraints to help the people in this region enjoy the standard of living experienced by their fellow Americans.

Thank you again for the opportunity to be here.

Mr. BEVILL. Thank you for the fine presentation that you always make and for the leadership that you have shown throughout all these years building and developing the Tennessee-Tombigbee Waterway.

[The statement of Mr. Waldon follows:]

STATEMENT
OF
DONALD G. WALDON, ADMINISTRATOR
TENNESSEE-TOMBIGBEE WATERWAY DEVELOPMENT AUTHORITY
BEFORE THE
U.S. HOUSE APPROPRIATIONS SUBCOMMITTEE
FOR
ENERGY AND WATER DEVELOPMENT
FEBRUARY 27, 1996

Mr. Chairman, as always it is a pleasure and a honor to appear before you and the other members of this committee.

I am sure that everyone who testifies this year will share a degree of melancholy if not trepidation that I have today, knowing that this meeting will likely be our last with Messrs Bevill and Myers as members of this Committee. You two have been the driving force behind the development of the nation's water resources for the last quarter of a century. It's difficult for all of us to comprehend the future for this important federal program without your leadership and support.

There was never a project built that was more dependent upon your support and influence than the Tennessee-Tombigbee Waterway. If it was not for you I would not be here today talking about the economic impact of the Tenn-Tom.

I am pleased to report that the waterway's benefits continue to increase. Commerce has grown steadily each year reaching 8.7 million tons in 1995, an 800 thousand- ton increase over the previous year.

The waterway has helped attract some $2.5 billion of new industries and plant expansions. Last year, alone, nearly $600 million of new manufacturing located in the waterway corridor to take advantage of the transportation savings offered by Tenn-Tom.

Last year, the Waterway Development Council contracted with West Alabama University to determine the number of jobs generated by the Tennessee-Tombigbee since its completion. Based on information submitted by companies that use the waterway, this research concluded that the Tenn-Tom has helped create about 42,000 new jobs with an annual payroll of $1.1 billion. Although most impressive, these estimated impacts are considered very conservative since only about 60% of the waterway users responded to the University's survey.

The waterway's recreational and tourism benefits have far exceeded everyone's expectations. Over 2.5 million visitor-days of use are recorded each year. These recreational activities generate about $170 million of additional spending each year. Many small businesses have sprung up in the communities along the waterway as a result of these new activities.

Tenn-Tom's benefits will continue to increase in the future if the region's and the nation's economies grow and if the waterway is properly operated and maintained by the Corps of Engineers.

We greatly appreciate the past support of this Committee for the funding needed to operate the Waterway. However, I regret to inform you there is about $5.4 million of maintenance and repair work needed to be accomplished but now indefinitely deferred due to lack of funding.

I know that you agree that it would be "penny wise and pound foolish" not to provide sufficient funds to maintain the physical integrity of this project considering its sizeable capital investment. While we do not know at this time the level of funding recommended by the Administration, we request that you approve this year's level of funding for FY 1997 and an additional $3.7 million be appropriated to accomplish part of the $5.4 million of the deferred O&M work. Although all the $5.4 million of work must be eventually accomplished, we are restrained from requesting the entire amount knowing the difficult decisions you must make in balancing needs with the budgetary constraints you face this year. However, we must not allow the deferral of maintenance work to grow like topsy which will degrade the benefits of the project like Tenn-Tom and eventually result in major rehabilitation costs later on.

There are two other projects important to the commercial users of the Tenn-Tom. We recommend that $3 million be approved to continue engineering and design work on a new lock at Kentucky Dam on the Tennessee River. The existing lock, built in 1942, is one of the worst bottlenecks in the entire national waterway system. This level of funding will permit consideration of the project as a new construction start by the year 2000.

We also support the request made by the Warrior-Tombigbee Development Association for appropriations to construct mooring cells at Demopolis and Coffeeville Locks. Most of Tenn- Tom's commerce will benefit from these safety measures. We trust that you will be able to fund these two projects.

Before I close, I would be remiss not to express our appreciation for your strong support for the Appalachian Regional Commission and the Tennessee Valley Authority, especially last year when their continuation was threatened. These two agencies provide invaluable services and assistance to one of the most economically depressed regions in the nation. While considerable progress has been made, this region still lags behind the rest of the country in quality of life and economic well being. We recommend that these programs be funded at the maximum levels possible to help the people of this region enjoy a standard of living experienced by their fellow Americans.

Thank you.

Mr. MYERS. The 8.7 million tons for last year on the Tenn-Tom is very impressive. What was the projection at the end of 10 years?

Mr. WALDON. It was around 14 million; but, as I recall, nearly three-quarters of that was coal exports. As you well know, those estimates were based on petroleum prices being from $50 to $60 a barrel. It was right after the oil embargo and everybody said that because the U.S. is one of the leading producers of coal that exports would increase. Those exports have never materialized. All the other commodities, with the exception of coal, are on track or greatly in excess. Forestry products is probably 400 to 500 percent more than was projected at the time.

Mr. MYERS. Sorry about the coal. Sorry I asked the question, I guess.

Mr. WALDON. Nobody wants to predict high prices of petroleum, but I think that is inevitable, and once that happens you will see increases in coal exports.

Mr. BEVILL. Forest products are still the number one product exported from Alabama to all parts of the world.

Mr. WALDON. Sure is.

Mr. BEVILL. Thank you very much.

TUESDAY, FEBRUARY 27, 1996.

ALABAMA-COOSA WATERWAY AND PORT OF MOBILE

WITNESSES

JERRY L. SAILORS, EXECUTIVE VICE PRESIDENT, COOSA-ALABAMA RIVER IMPROVEMENT ASSOCIATION

J. THOMAS MCKENZIE, IMMEDIATE PAST PRESIDENT, COOSA-ALABAMA RIVER IMPROVEMENT ASSOCIATION

Mr. BEVILL. Next we have our friend Mr. Jerry Sailors, Executive Vice President, Coosa-Alabama River Improvement Association, another one of those very important waterways in Alabama. We are pleased to have you with us.

Mr. SAILORS. Thank you, Mr. Chairman.

I would like to present Tom McKenzie, the immediate past President of the Association, representing Mr. Raff Clemons, our new President of the Association.

Mr. BEVILL. He has been a leader for a long time in this waterway and still is. We appreciate the work you have done. One of these days we will have the Coosa up to Rome, Georgia.

Mr. SAILORS. I would also like to acknowledge some people in the audience: Judge Otha Lee Biggs.

Mr. BEVILL. Stand up. We know that when you come here you are busy people and you are making a sacrifice to be here. We recognize that fact, and certainly we want your name in the record to show your presence.

Mr. SAILORS. Jim Harrington, our new Vice President for the State of Georgia from Rome, Georgia, the Rome city Commissioner.

Also representing that area, not able to be here today but in Washington, is Mayor Sue Glidewell. She is not feeling well so decided to stay in the hotel.

Mr. BEVILL. She has been here every year. She is a great leader and a very outstanding mayor. She will be mayor of Greenville City as long as she lives.

Mr. SAILORS. Tom will make a short statement.

Mr. MCKENZIE. Mr. Chairman and distinguished committee members, I am happy to have the opportunity to share with you our view for needed funding in support of the fiscal year 1997 energy and water development appropriations for the projects listed in our Association's written statement for the record, which we have submitted. In the statement you will notice the following:

First, funding requesting for the Coosa-Alabama Rivers, Mobile Harbor and ancillary projects within the basins.

Second, a plea to refrain from increasing taxes on users of the Nation's inland waterways.

A request to urge the States of Alabama, Georgia and Florida to resolve water management issues among them. This has been going on for about three years now.

A request to modify the Endangered Species Act to ensure a balanced decision-making process.

There are many threats to the continued viability of the Coosa-Alabama river system as an integral part of our Nation's transportation infrastructure. Budget cuts in the Corps of Engineers' operation and maintenance account, Corps manpower reductions, continued attempts to raise inland waterway user taxes or fees, and Fish and Wildlife attempts to provide a critical habitat for endangered species at the expense of commercial traffic, and the very nature of the Alabama River itself all are working to eliminate commercial traffic on this river.

The number one priority must be to maintain those facilities and projects that support the current navigation system. This can be done only through adequate funding. Then we must attract investment within the river basin by providing a reliable navigation channel, by maintaining a coordinated system of managing the water resources and by repelling all attempts to impede commercial traffic or close down the waterway. All of these points are expanded on in the submitted statement.

Mr. Chairman—both chairmen—we wish to take this opportunity to express our gratitude to you, Mr. Bevill, and to you, Mr. Myers, as well as to members of the committee for the support you have given us over the years. We congratulate both you gentlemen for a job well done during your tenure in Congress and wish you Godspeed in your retirement. Thank you for your service.

I think I first came here some time in the late 1970s and have been the spokesman for the organization along with our executive VP at least the last eight years, so we have had the opportunity to share in your welcome. Thank you very much.

Mr. BEVILL. Thank you very much.

Chairman Myers and Chairman Sonny Montgomery and I are the only three left of the 90th Congress. There were about 70 of us that came here, so the three of us arrived here at the same time, sworn in the same minute; and we are leaving at the same time, 30 years later. That will be the end of the 90th Congress as far as—we call it the 90th Club, I believe.

Mr. MYERS. Sonny and Tom both made the decision last year, and I couldn't let them get ahead of me.

Mr. BEVILL. We thought we were leaving him in charge; and he is leaving, too.

[The statement of Mr. McKenzie follows:]

MR CHAIRMAN & DISTINGUISHED COMMITTEE MEMBERS:

I AM HAPPY TO HAVE THE OPPORTUNITY TO SHARE WITH YOU OUR VIEW OF NEEDED FUNDING AND SUPPORT IN THE FISCAL YEAR 1997 ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR THE PROJECTS LISTED IN OUR ASSOCIATION'S WRITTEN STATEMENT FOR THE RECORD. IN THE STATEMENT YOU WILL NOTICE THE FOLLOWING:

1) FUNDING REQUESTS FOR THE COOSA-ALABAMA RIVERS, MOBILE HARBOR, AND ANCILLARY PROJECTS WITHIN THE BASINS;

2) A PLEA TO REFRAIN FROM INCREASING TAXES ON USERS OF THE NATION'S INLAND WATERWAYS;

3) A REQUEST TO URGE THE STATES OF ALABAMA, GEORGIA, AND FLORIDA TO RESOLVE WATER MANAGEMENT ISSUES AMONG THEM;

4) A REQUEST TO MODIFY THE ENDANGERED SPECIES ACT TO ENSURE A BALANCED DECISION MAKING PROCESS.

THERE ARE MANY THREATS TO THE CONTINUED VIABILITY

OF THE COOSA-ALABAMA RIVER SYSTEM AS AN INTEGRAL PART OF OUR NATION'S TRANSPORTATION INFRASTRUCTURE. BUDGET CUTS IN THE CORPS OF ENGINEERS OPERATIONS AND MAINTENANCE ACCOUNT, CORPS MANPOWER REDUCTIONS, CONTINUED ATTEMPTS TO RAISE INLAND WATERWAY USER TAXES OR FEES, FISH AND WILDLIFE ATTEMPTS TO PROVIDE A CRITICAL HABITAT FOR AN ENDANGERED SPECIES AT THE EXPENSE OF COMMERCIAL TRAFFIC, AND THE VERY NATURE OF THE ALABAMA RIVER ITSELF, ALL ARE WORKING TO EITHER IMPEDE OR ELIMINATE COMMERCIAL TRAFFIC ON THE RIVER.

THE NUMBER ONE PRIORITY MUST BE TO MAINTAIN THOSE FACILITIES AND PROJECTS THAT SUPPORT THE CURRENT NAVIGATION SYSTEM. THAT CAN BE DONE ONLY THROUGH ADEQUATE FUNDING. THEN WE MUST ATTRACT INVESTMENT WITHIN THE RIVER BASIN BY PROVIDING A RELIABLE NAVIGATION CHANNEL, BY MAINTAINING A WELL-COORDINATED SYSTEM OF MANAGING THE WATER RESOURCES, AND BY REPELLING ALL ATTEMPTS TO IMPEDE COMMERCIAL TRAFFIC OR CLOSE DOWN THE WATERWAY. ALL OF THESE

POINTS ARE EXPANDED UPON IN OUR SUBMITTED STATEMENT.

MR. CHAIRMAN, WE WISH TO TAKE THIS OPPORTUNITY TO EXPRESS OUR GRATITUDE TO YOU, MR. BEVILL, AND TO YOU, MR. MYERS, AS WELL AS MEMBERS OF YOUR COMMITTEE, FOR THE SUPPORT YOU HAVE GIVEN US OVER THE YEARS. WE CONGRATULATE BOTH OF YOU GENTLEMEN FOR A JOB WELL DONE DURING YOUR TENURE IN CONGRESS AND WISH YOU GODSPEED AND FAIR WEATHER UPON YOUR RETIREMENT. THANK YOU FOR YOUR SERVICE.

SUMMARY LISTING

LETTERS SUPPORTING APPROPRIATIONS REQUEST FOR F/Y 1996 FOR PROJECTS ON THE ALABAMA-COOSA RIVER SYSTEM SUBMITTED FOR RECORD AND FILE OF THE HOUSE SUBCOMMITTEE ON APPROPRIATIONS FOR ENERGY AND WATER DEVELOPMENT HEARINGS

10:40 A.M., FEBRUARY 27, 1996
Rayburn House Office Building, Room 2362-B, Washington, D.C.

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1. Governor Fob James, State of Alabama, Montgomery, AL
2. Coosa-Alabama River Improvement Association, Inc., Montgomery, AL
3. Robert M. Creswell, Consultant, Camden, AL
4. Alabama Power Company, Susan Story, Birmingham, Alabama
5. J.T. Jordan Cotton Inc., James T. Jordan, Centre, Alabama
6. City of Selma, Carl C. Morgan, Jr., Selma, Alabama
7. Monroe County Commission, Judge Otha Lee Biggs, Monroeville, AL
8. Monroe Area Chamber of Commerce, Sandy Smith, Monroeville, AL
9. Monroe County Industrial Development Board, Harvel Deas, Monroeville, AL
10. Selma and Dallas County Chamber of Commerce, Jamie, Wallace, Selma, AL
11. St. Clair County Commission, Roy Banks, Ashville, AL
12. City of Monroeville, Anne H. Farrish, Monroeville, AL
13. Alabama River Pulp Company, Inc. Glenn G. Wiegel, Perdue Hill, AL

STATE OF ALABAMA
GOVERNOR'S OFFICE
MONTGOMERY 36130

FOB JAMES, JR.
GOVERNOR

February 27, 1996

The Honorable John T. Myers, Chairman
Subcommittee on Appropriations for
Energy and Water Development
United States House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Thank you, for the opportunity to provide our views concerning the Federal water resources activities and projects in Alabama. I join with the Tennessee-Tombigbee Waterway Development Authority; the Warrior-Tombigbee Development Association; the Coosa-Alabama River Improvement Association; the Tri-Rivers Waterway Development Association; the Tennessee River Valley Association and others in support of the continuation of Federal water resource projects in Alabama.

Our state and Nation have been blessed with water resources which lend themselves to the development and use for the benefit of our citizens. Water resource developments in Alabama include: the deep harbor and extensive port facilities at the Port of Mobile, providing export opportunities for the region and nation's products; the Tennessee-Tombigbee Waterway providing a vital connecting link to the inland waterway system and the heartland of our nation; the Warrior-Tombigbee Rivers waterway providing opportunities to utilize our abundant coal resources for our domestic use and export of steel, pipe, and other products; the Coosa-Alabama and the Chattahoochee-Apalachicola waterway providing the opportunity for development, transportation of natural resources, agricultural and forest products; the Tennessee River waterway providing a vital transportation link in the Tennessee River Valley of Alabama; and the Gulf Intracoastal Waterway providing a vital waterway link to the ports of the Gulf of Mexico.

All of the waterways in Alabama are connected to and are an integral part of, our national inland waterway transportation system providing a conduit for the economical and safe movement of commerce.

I respectfully request your consideration and assistance by providing the federal funding necessary for the full time operation of the federal waterway facilities and projects in Alabama. The federal support is necessary to ensure the continuation of these projects and to allow for use of these important facilities, both public and private. The federal funding, while an essential element, however, represents only a portion of the investment and commitment necessary to utilize these resources A combination of local investment, both private and public, is also necessary to gain benefits for our citizens

On January 3, 1992, the States of Alabama, Florida, Georgia, and the U.S. Army Corps of Engineers signed a Memorandum of Agreement (MOA) concerning interstate water resource issues in the Alabama-Coosa-Tallapoosa (ACT) and the Apalachicola-Chattahoochee-Flint (ACF) River Basins This agreement will terminate on September 30, 1996. The MOA temporarily set aside the interstate dispute between the parties, while Alabama, Florida, Georgia, and the Corps of Engineers jointly participate in the ACT/ACF Comprehensive Water Resources Study. This study will provide information which will assist in an understanding of the capabilities of the water resources to meet the forecast needs of the region for the foreseeable future It should also provide tools to evaluate water management options to meet future demands with the finite water resources. Hopefully, the study will also recommend an appropriate and agreeable management structure for the ACT and ACF basins We anticipate this study will provide a basis for a better understanding for our water resources resulting in negotiations that provide an equitable sharing of interstate water.

With the continued endorsement of the Subcommittee in providing the funding necessary for the federal water resource projects in Alabama, I believe we can successfully address the complex issues facing us and best utilize these water resources to the benefit of the Nation.

Thank you, and the other members of the Subcommittee, for your support of the federal water resource projects and activities in Alabama and the nation.

Sincerely,

Fob James, Jr

Fob James, Jr.
Governor

COOSA-ALABAMA RIVER IMPROVEMENT ASSOCIATION'S DELEGATION
APPEARING BEFORE THE HOUSE, SUBCOMMITTEE ON APPROPRIATIONS FOR ENERGY AND WATER DEVELOPMENT HEARINGS

FEBRUARY 27, 1996
Rayburn House Office Building, Room 2362-B, Washington, D.C.

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1. J.T. "Tom" McKenzie, Pres., C.A.R.I.A., Gadsden, AL
2. Jerry L. Sailors, Executive Vice Pres. C.A.R.I.A., Montgomery, AL
3. Mayor Sue Glidewell, Rainbow City, AL
4. Walter B. Stevenson, Jr., State of Alabama, ADECA, Montgomery, AL
5. Judge Otha Lee Biggs, Monroe County, Monroeville, AL
6. John Carey, Alabama State Docks, Mobile, AL
7. Bill Satterfield, Balch & Bingham, Birmingham, AL
8. Jim Harrington, Rome City Commission, Rome, GA

COOSA-ALABAMA RIVER IMPROVEMENT ASSOCIATION, inc.

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GADSDEN, ALABAMA

B. H. MOONEY, III
VICE PRESIDENT
ROME, GEORGIA

LISTER HILL PROCTOR
VICE PRESIDENT
SYLACAUGA, ALABAMA

ROBERT F. HENRY, JR.
SECRETARY-TREASURER
MONTGOMERY, ALABAMA

STATEMENT OF THE

COOSA-ALABAMA RIVER IMPROVEMENT ASSOCIATION, INC., MONTGOMERY, ALABAMA

* * *

PRESENTED BY:
J. THOMAS MCKENZIE, PRESIDENT

* * *

HOUSE SUBCOMMITTEE ON APPROPRIATIONS
FOR ENERGY AND WATER DEVELOPMENT
- MR. JOHN MYERS, CHAIRMAN -

* * *

10:40 A.M., TUESDAY, FEBRUARY 27, 1996

"Over 100 Years Of Service To State And Nation"

MR. CHAIRMAN & DISTINGUISHED COMMITTEE MEMBERS:

THIS STATEMENT INCLUDES THE FOLLOWING:

A) A PLEA TO EXERCISE CAUTION AND DUE DELIBERATION BEFORE MAKING CUTS IN OUR NATION'S TRANSPORTATION SYSTEM.

B) A REQUEST FOR SUPPORT IN THE FOLLOWING AREAS:

  1) O&M FUNDING FOR THE COOSA-ALABAMA BASINS AS WELL AS MOBILE HARBOR;
  2) FUNDING FOR THE STUDY OF A FOURTH LOCK AND DAM ON THE ALABAMA RIVER;
  3) REOPENING THE COOSA NAVIGATION PROJECT;
  4) RESISTING ANY ATTEMPT TO RAISE USER FUEL TAXES ON THE INLAND RIVER NAVIGATION INDUSTRY;
  5) CONTINUED SUPPORT FOR THE COMPREHENSIVE BASIN MANAGEMENT STUDY;
  6) AMENDING THE ENDANGERED SPECIES ACT OF 1973 WITH REASONABLE AND EFFECTIVE MEASURES TO PROTECT OUR CITIZENS AS WELL AS THE ENVIRONMENT.

EXPANDED STATEMENT

THANK YOU, MR. CHAIRMAN, FOR THE OPPORTUNITY TO PRESENT TO THIS SUBCOMMITTEE MY PERSPECTIVE ON SEVERAL TOPICS OF INTEREST TO THE MEMBERS OF THE COOSA-ALABAMA RIVER IMPROVEMENT ASSOCIATION, A 105-YEAR OLD ORGANIZATION THAT PROMOTES THE ECONOMIC AND ENVIRONMENTAL DEVELOPMENT OF THE ALABAMA-COOSA-TALLAPOOSA RIVER BASIN FOR THE GENERAL WELFARE OF THE PEOPLE WHO RESIDE IN THAT BASIN. I SPEAK FOR A LARGE AND DIVERSE GROUP OF PRIVATE CITIZENS AND POLITICAL AND INDUSTRIAL ORGANIZATIONS WHO SEE THE CONTINUED DEVELOPMENT OF THE COOSA-ALABAMA WATERWAY AS AN OPPORTUNITY FOR ECONOMIC GROWTH, AND WHO REGARD THE EFFECTIVE MANAGEMENT OF WATER RESOURCES WITHIN THE RIVER BASINS AS A VITAL INTEREST OF THE CITIZENS WHO LIVE THERE.

OUR MEMBERSHIP REFLECTS A BROAD RANGE OF CALLINGS AND PROFESSIONS, FROM SHIPPERS AND TOW OPERATORS TO BUSINESSMEN, BANKERS, AND A VARIETY OF OTHER PRIVATE INDIVIDUALS WHO HAVE A STAKE IN FUTURE ECONOMIC DEVELOPMENT FOR THEIR FIRMS OR SUCCESSORS TO ENJOY. THEN THERE IS A LARGE GROUP OF ELECTED OFFICIALS AND THEIR CONSTITUENTS TYPICAL OF THE TWENTY-THREE MUNICIPALITIES AND NINETEEN COUNTIES ALONG THE WATERWAY WHO ARE MEMBERS OF THIS ASSOCIATION. THESE MEMBERS ARE WORKING DILIGENTLY TO DEVELOP OUR WATERWAY INTO A PRODUCTIVE PART OF THE RIVER INFRASTRUCTURE OF THE STATE AND NATION. THEIR EFFORTS SPRING FROM A DESIRE NOT ONLY TO

IMPROVE THE ECONOMIC CONTRIBUTION OF ENHANCED TRANSPORTATION AVAILABLE TO USERS, BUT TO PROVIDE A MEANS OF GROWTH.

I WOULD LIKE TO PREFACE OUR REQUESTS FOR SPECIFIC FUNDING LINES WITH A FEW REMARKS REGARDING THE MOOD AND TONE OF CURRENT BUDGET CUTTING EXERCISES WITHIN THE FEDERAL GOVERNMENT, AS THEY APPLY TO OUR NATION'S WATERWAYS.

THE CURRENT BUDGET DELIBERATIONS ARE DIFFICULT, BUT IN THE COURSE OF RESOLVING THE DIFFERENCES THAT NOW EXIST, CONGRESS MUST PROTECT THE NATION'S TRANSPORTATION INFRASTRUCTURE. WE URGE CAUTION AND DUE DELIBERATION BEFORE MAKING EXPEDIENT CUTS IN THAT INFRASTRUCTURE. NOTABLE AMONG THE IDEAS SURFACING THIS PAST YEAR WAS THE PROPOSED SALE OF THE SOUTHEASTERN POWER ADMINISTRATION (SEPA), INCLUDING LOCKS, DAMS, AND RESERVOIRS, TO PRIVATE INTERESTS. EMPHASIS IN THIS PROPOSAL WAS ON SEPA'S POWER GENERATION CAPABILITY, ALMOST TO THE EXCLUSION OF THOSE FACILITIES THAT SUPPORT THE NAVIGATION INDUSTRY: LOCKS, DAMS, AND RESERVOIRS. MANAGEMENT OF THOSE LOCKS, DAMS, AND RESERVOIRS IS A COMPLEX, CLOSELY COORDINATED OPERATION, ABSOLUTELY VITAL TO PROPER NAVIGATION CONDITIONS. ON THE COOSA-ALABAMA SYSTEM, THAT MANAGEMENT IS PROVIDED BY THE CORPS OF ENGINEERS AND ALABAMA POWER COMPANY. WE ARE CONCERNED THAT SELLING THE LOCKS, DAMS, AND RESERVOIRS TO OTHER, PERHAPS MULTIPLE, OWNERS CAN ONLY MAKE A COMPLICATED MANAGEMENT ACTION EVEN MORE SO TO THE DETRIMENT OF THE NAVIGATION INDUSTRY. WE HAVE NO OBJECTIONS TO SELLING THE POWER GENERATION CAPABILITY OF THE SEPA FACILITIES, BUT URGE THAT MANAGEMENT OF LOCKS AND RESERVOIRS REMAIN IN THE HANDS OF THE CORPS OF ENGINEERS. THERE IS PRECEDENT FOR THIS ARRANGEMENT: ALABAMA POWER COMPANY OPERATES THE POWER GENERATION FACILITIES ON BOTH BANKHEAD DAM AND HOLT DAM ON THE BLACK WARRIOR RIVER WHILE THE CORPS OF ENGINEERS MANAGES THE RESERVOIRS AND LOCKS.

WITH THAT BEING SAID, MR. CHAIRMAN, SINCE THE CORPS OF ENGINEERS BUDGET HAS NOT YET BEEN RELEASED, WE URGE THAT PRIORITIES WITHIN YOUR APPROPRIATION BE ON MAINTAINING THE OPERATIONS AND MAINTENANCE FOR PROJECTS IN THE COOSA-ALABAMA RIVER SYSTEM AND IN MOBILE HARBOR AT LEVELS EQUAL TO THAT OF FY 96. WE ARE CONCERNED THAT ANY BUDGET STRATEGY THAT REDUCES FUNDING FOR THE OPERATION AND MAINTENANCE OF INLAND AND INTRACOASTAL WATERWAYS WILL HAVE A DETRIMENTAL EFFECT ON ECONOMIC GROWTH AND DEVELOPMENT. WE CANNOT ALLOW THAT TO HAPPEN. IN THE ALABAMA-COOSA RIVER BASIN, EXISTING RIVER PROJECTS AND FACILITIES SUPPORT THE COMMERCIAL NAVIGATION, HYDROPOWER, AND RECREATIONAL ACTIVITIES SO CRITICAL TO OUR REGION'S ECONOMY. SO THE FIRST PRIORITY MUST BE THE O&M FUNDING THAT PERPETUATES THOSE PROJECTS, INCLUDING CONTINUED REHABILITATION OF EXISTING FACILITIES, MAINTENANCE DREDGING, AND MODIFICATION OF TRAINING DIKES. WE RECOMMEND THE FOLLOWING FUNDING LINES:

PROJECT	ASSOCIATION'S BUDGET REQUEST
ALABAMA-COOSA RIVER, AL* (AL RIVER INCL CLAIBORNE L&D)	$ 5,668,000
MILLER'S FERRY L&D	$ 5,156,000
ROBERT F. HENRY L&D	$ 3,688,000
MOBILE HARBOR	$ 17,780,000
LAKE ALLATOONA, GA	$ 5,894,000
CARTERS LAKE, GA	$ 5,218,000
LOWER ALABAMA NAVIGATION STUDY (AL RIVER SOUTH OF CLAIBORNE) - FEASIBILITY PHASE	$ 300,000
TOTALS	$ 43,704,000

*INCLUDES 72 MILES FROM THE MOUTH OF THE ALABAMA RIVER THROUGH CLAIBORNE L&D TO MILLER'S FERRY. COOSA RIVER NOT INCLUDED. ALSO INCLUDES MONIES FOR LAND ACQUISITION AND MONITORING PROGRAMS.

ONCE THE CORPS OF ENGINEERS' BUDGET IS RELEASED, WE WOULD LIKE THE OPPORTUNITY TO REVISE OUR REQUESTED FUNDING LINES AS NECESSARY.

TO ATTRACT NEW BUSINESS AND INDUSTRIAL TRAFFIC, AND EVEN TO MAINTAIN THAT WHICH CURRENTLY PLIES THE WATERS, WE MUST IMPROVE THE INFRASTRUCTURE OF THE RIVER SYSTEM. OVER THIS PAST YEAR, SEVERAL BUSINESSES HAVE INQUIRED ABOUT THE MONTGOMERY AREA AS A POTENTIAL LOCATION FOR THEIR OPERATION, BUT WHERE ALL OTHER CONDITIONS FOR THEIR RELOCATION WERE FAVORABLE, THE UNFAVORABLE RELIABILITY OF THE ALABAMA RIVER AS A TRANSPORTATION NODE DETERRED THEM. WHO KNOWS HOW MANY OTHERS ELIMINATED THE AREA BEFORE EVEN INQUIRING BECAUSE OF THE RIVER RELIABILITY? WE HAVE RECEIVED INQUIRIES IN OUR OFFICE FROM FORMER USERS OF THE RIVER WHO, HAVING CEASED OPERATIONS DUE TO THE UNFAVORABLE RELIABILITY, WANTED TO KNOW IF THE CONDITIONS HAD BEEN IMPROVED BECAUSE THEY WERE STILL INTERESTED IN DOING BUSINESS NEAR MONTGOMERY. WHILE THE ENTIRE ALABAMA RIVER PRESENTS NAVIGATION CHALLENGES, THE MAJOR PROBLEMS ARE BELOW CLAIBORNE DAM WHERE PREVIOUS INVESTMENTS IN TRAINING DIKES AND DEVICES HAVE ONLY SLIGHTLY IMPROVED THE NAVIGATION CONDITIONS IN THAT AREA. THE MOST EFFECTIVE SOLUTION TO THAT PROBLEM IS A FOURTH LOCK AND DAM TO BE CONSTRUCTED AT THE APPROPRIATE SITE. CORPS OF ENGINEERS-MOBILE IS CURRENTLY CONDUCTING A RECONNAISSANCE STUDY OF THAT OPTION. WE STRONGLY SUPPORT THAT STUDY AND URGE THAT FUNDING OF AT LEAST $300,000 BE AVAILABLE FOR A FOLLOW-ON FEASIBILITY STUDY. WE MUST IMPROVE THE NAVIGATION CONDITIONS IN THAT PART OF THE RIVER TO HAVE ANY HOPE OF ENTICING RIVER-DEPENDENT INDUSTRY TO CHOOSE THE ALABAMA RIVER BASIN AS ITS HOME.

AS YOU ARE AWARE, MR. CHAIRMAN, ONE OF OUR ASSOCIATION'S MAJOR GOALS IS THE COMPLETION OF A NAVIGABLE WATERWAY FROM MOBILE TO ROME, GEORGIA. THE HISTORY OF THE COOSA RIVER PROJECT IS WELL KNOWN BY THIS COMMITTEE, BUT THE PROPOSAL IS IN LINE WITH OUR EMPHASIS ON BOTH INFRASTRUCTURE INVESTMENT AND THE CREATION OF JOBS AND ECONOMIC OPPORTUNITY THROUGHOUT OUR REGION. PLEASE REMEMBER THAT THE PRE-DESIGN ENGINEERING SURVEYS ARE COMPLETE, SO THAT ONE OF THE MOST TIME-CONSUMING REQUIREMENTS OF THE PROJECT IS ALREADY ON THE SHELF. WE ARE WELL AWARE OF THE RESTRICTIVE FUNDING FOR SUCH UNDERTAKINGS IN THE CURRENT ENVIRONMENT, BUT ASK THE COMMITTEE TO RECOGNIZE THAT THE COMPLETION OF SUCH A PROJECT IS ONE OF LARGEST AND MOST RAPID GENERATORS OF JOBS CURRENTLY AVAILABLE. WE OWE IT TO THE PEOPLE OF THE COOSA-ALABAMA RIVER BASIN, THE STATES OF ALABAMA AND GEORGIA, AND THE ENTIRE REGION TO MAINTAIN THE VISION OF COMPLETING THIS WATERWAY.

ANOTHER MECHANISM TO MAKE THE RIVER SYSTEM ATTRACTIVE TO POTENTIAL USERS IS TO KEEP THE COST OF SHIPPING VIA WATERWAYS AS LOW AS POSSIBLE. A POPULAR SUGGESTION TO DEFRAY SOME OF THE COSTS OF MAINTAINING AND UPGRADING OUR NATION'S WATERWAYS IS TO INCREASE A USER'S FUEL TAX. ANALYSES OF PREVIOUS PROPOSALS INDICATE THAT SUCH AN INCREASE WOULD HAVE A DETRIMENTAL EFFECT ON CONSUMER PRICES AND TRADE BALANCE IN THE SHORT RUN, AND IN THE LONG RUN ON THE ABILITY OF THE FEDERAL-PRIVATE PARTNERSHIP TO MAINTAIN THE SYSTEM. THE NATION'S WATERWAY SYSTEM IS A NATIONAL ASSET. THE ENTIRE NATION BENEFITS FROM IT, AND IT SHOULD BE FUNDED AS SUCH, NOT ON THE BACKS OF THOSE WHO HAPPEN TO OPERATE VESSELS OR SHIP COMMODITIES ON ITS WATERS.

ANOTHER ISSUE THAT COULD RAISE THE SPECTER OF INCREASING USER TAXES IS THE DECISION OF THE U.S. COURT OF INTERNATIONAL TRADE TO DECLARE UNCONSTITUTIONAL THE EXPORT FEES CURRENTLY COLLECTED IN THE HARBOR MAINTENANCE TRUST FUND. THERE IS THE PROSPECT ALSO THAT IMPORT FEES MAY BE CHALLENGED AS WELL. THE COURT'S DECISION IS ON APPEAL BY THE ADMINISTRATION, BUT SHOULD THE DECISION BE UPHELD AND EXPORT FEES ARE ELIMINATED, AND SHOULD IMPORT FEES BE SUCCESSFULLY CHALLENGED, IT WILL BE A SEVERE BLOW TO THE CORPS OF ENGINEERS BUDGET. THIS FUND PROVIDES APPROXIMATELY $500 MILLION A YEAR TO THE CORPS TO MAINTAIN THE NATION'S DEEP WATER PORTS. IF THAT $500 MILLION IS LOST, WE FEAR THAT PRIORITIES FOR CORPS FUNDING WILL GO TO DEEP WATER PORTS AT THE EXPENSE OF MAINTENANCE ON OUR INLAND WATERWAYS, AND THAT PROPONENTS OF INCREASING USER TAXES WILL SEEK TO RECOVER SOME OF THE LOST FUNDING ON THE BACKS OF INLAND WATERWAY SHIPPERS AND CARRIERS.

MR. CHAIRMAN, SINCE 1992 THE FEDERAL GOVERNMENT HAS SPONSORED A STUDY TO DETERMINE THE WATER RESOURCES AVAILABLE IN THE ALABAMA-COOSA-TALLAPOOSA AND THE APALACHICOLA-CHATTAHOOCHEE-FLINT RIVER BASINS, THE NEED FOR THAT WATER, AND SOME MECHANISM TO MANAGE THOSE RESOURCES THROUGH THE YEAR 2050. WHILE FUNDING FOR THAT STUDY ENDS WITH THIS FISCAL YEAR, WE URGE CONGRESS TO ENCOURAGE THE STATES OF

ALABAMA, GEORGIA, AND FLORIDA TO PERSEVERE IN THEIR EFFORTS TO DEVELOP A LASTING AGREEMENT ON THE DISPOSITION OF ALL THE VITAL WATER RESOURCES IN THE REGION.

LASTLY, WE ASK CONGRESS TO MODIFY THE ENDANGERED SPECIES ACT TO REQUIRE AN ANALYSIS OF THE ECONOMIC AND SOCIAL FACTORS AND IMPACTS ON ALL CONCERNED BEFORE APPROVAL FOR AN OFFICIAL LISTING CAN BE MADE. OUR ASSOCIATION SUPPORTS REASONABLE AND EFFECTIVE MEASURES TO PROTECT OUR ENVIRONMENT, BUT THOSE MEASURES MUST BALANCE THE ROLE OF A PARTICULAR SPECIES IN THE NATURE OF THINGS AGAINST THE NEEDS OF PEOPLE. WE CAN ONLY POINT TO PREVIOUS EXAMPLES, OF WHICH THE COMMITTEE IS WELL AWARE, OF HOW FAILURE TO ADDRESS THE ECONOMIC AND SOCIAL IMPACTS OF A LISTING BEFOREHAND HAS CAUSED FAR MORE HARM TO THE HUMAN POPULATION THAN WAS WARRANTED. WE DON'T ASK TO DO AWAY WITH THE NEED TO PROTECT OUR ENVIRONMENT, BUT SIMPLY TO MAKE THE ENDANGERED SPECIES ACT AN EFFECTIVE TOOL WITH WHICH THIS NATION CAN PROGRESS.

IN CLOSING, MR. CHAIRMAN, WE REQUEST YOUR SUPPORT IN THE FOLLOWING AREAS:

1) O&M FUNDING FOR THE COOSA-ALABAMA BASINS AS WELL AS MOBILE HARBOR;

2) CONTINUED FUNDING FOR A FOURTH LOCK AND DAM STUDY ON THE ALABAMA RIVER;

3) REOPENING THE COOSA NAVIGATION PROJECT;

4) RESISTING ANY ATTEMPT TO RAISE USER FUEL TAXES ON THE INLAND RIVER NAVIGATION INDUSTRY;

5) CONTINUING SUPPORT FOR THE COMPREHENSIVE BASIN WATER MANAGEMENT STUDY; AND

6) AMENDING THE ENDANGERED SPECIES ACT OF 1973 TO REQUIRE AN ECONOMIC AND SOCIAL IMPACT ANALYSIS PRIOR TO LISTING AND TO ESTABLISH A BALANCE IN THE PROSECTION OF SUCH A LISTING.

MR. CHAIRMAN, WE WISH TO TAKE THIS OPPORTUNITY TO EXPRESS OUR GRATITUDE TO YOU, MR. BEVILL, AND TO YOU, MR. MYERS, AND ALL MEMBERS OF YOUR COMMITTEE, FOR YOUR SUPPORT WHILE YOU HAVE BEEN IN CONGRESS. WE CONGRATULATE YOU FOR A JOB WELL DONE AND WISH YOU GODSPEED AND FAIR WEATHER UPON YOUR RETIREMENT. THANK YOU FOR YOUR SERVICE.

RESPECTFULLY,

J.T. MCKENZIE
COOSA-ALABAMA RIVER
IMPROVEMENT ASSOCIATION

ROBERT M. CRESWELL
CONSULTANT
500 BROAD STREET
CAMDEN, AL 36726
(205) 682-9576

February 27, 1996

Honorable John T. Myers, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
U. S. House of Representatives
2372 Rayburn House Building
Washington, DC 20515

Dear Representative Myers:

As a former Resource Manager for 15 years with the Corps of Engineers, I have an abiding interest in the Coosa-Alabama River Project and support the Coosa-Alabama River Improvement Assn., Inc. in its request for FY96 in its effort to maintain and extend the navigable project.

I feel that a resumption of the design and engineering work suspended in 1983 should be resumed and the present waterway on the Alabama River from Mobile to Montgomery should be maintained, including dredging, and the channel, locks, dams, powerhouses and recreational facilities operated efficiently. Funding of a study to make the lower Alabama River usable year-round and construction of a fourth dam below Claiborne Lock & Dam is urged.

When the project was placed in operation, investors in industrial plants along the channel and the general public were assured that a 9-foot channel would be maintained and that the public would have access to the river for recreation at numerous landings and ramps.

In addition, the Comgress should continue to support the study of the Corps of Engineers and Alabama/Georgia/Florida to resolve the two-basin water dispute now pending. I also urge you to support the amending of the Endangered Species Act to require the consideration of economic impacts in a decision to list a species as endangered or threatened as well as mandatory designation of critical habitat at the time the species is listed. Likewise, the Fish & Wildlife Service should be directed to develop procedures to share information and specimens with parties closely related to the listing process.

Your committee's consideration of these factors in funding the Coosa-Alabama River project will be appreciated.

Sincerely,

Robert M Creswell

Robert M. Creswell

Alabama Power Company
600 North 18th Street
Post Office Box 2641
Birmingham, Alabama 35291
Telephone: 205 250-2907

Susan N. Story
Vice President-Corporate Real Estate

Alabama Power
the southern electric system

February 7, 1996

Honorable John T. Myers, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
2372 Rayburn House Office Building
U.S. House of Representatives
Washington, D.C. 20515

Dear Chairman Myers:

On behalf of Alabama Power Company I am pleased to submit the attached statement of support for the FY1997 appropriations request of the Coosa-Alabama River Improvement Association. This association has a long history of service to the state of Alabama in its efforts to appropriately develop and utilize the resources of the Coosa-Alabama river system for the well-being of the State and the Nation.

Sincerely,

Susan N. Story
Susan N. Story

:ajr

Attachment(s)

Statement of Alabama Power Company
Congressional Appropriations Subcommittees
Washington, D.C.
February 27, 1996

Alabama Power Company appreciates the opportunity to express its support for the request of the Coosa-Alabama River Improvement Association, Inc., before the Congressional Appropriations Subcommittees that adequate funding be appropriated in FY1997 to fund this Association and to satisfactorily provide essential O&M and capital improvements to navigable waterways in the state of Alabama maintained by the U.S. Army Corps of Engineers. Proper maintenance and improvement to inland waterways is essential to the economic well-being of the state, as well as supporting international commerce so vital to the region and the Nation. Navigable inland waterways that provide access to international ports provide an alternative transportation route for bulk and high volume cargo that is essential for economic competition in the international market place.

Alabama Power Company utilizes inland waterways to barge coal, petroleum, and other essential commodities to its fossil power plants. This transportation source not only lowers freight costs, but insures supplies by providing sources from alternative suppliers throughout the country. It is important that timely and appropriate channel maintenance and dredging be performed.

Of special interest to Alabama Power Company is the continued operation and maintenance of the reservoirs and hydroelectric plants at the Allatoona and Carters projects. These reservoirs, in conjunction with other storage reservoirs within the Coosa-Alabama Basin, provide flow essential to ensuring a dependable and adequate supply of electricity for the Southeast, at a reasonable cost, and to supporting navigation flows critical to the operation of the Alabama River navigation channel.

Congress is to be commended for its decision to authorize the Army Corps of Engineers - working in partnership with Alabama, Georgia, and Florida - to conduct a Comprehensive Study of the Alabama, Coosa, and Tallapoosa (ACT) and the Appalachicola, Chattahoochee, and Flint (ACF) river basins. Important results from this study will be forthcoming in FY1997.

Congress is to be commended for its direct interest and involvement in the issue of the proposal to list the Alabama River Sturgeon as Rare and Endangered, and the companion legislation to declare its critical habitat. Objections raised by the public and by several Congressmen, ultimately resulted in the withdrawal of this listing proposal. Had this listing succeeded, tremendous impact to navigation on the Alabama, Warrior, and Tombigbee waterways would have occurred, with billions of dollars in associated economic losses.

J. T. Jordan Cotton, Inc.
Rt. #1, Box 78
Centre, Al. 35960
Ph. No. 205-927-5618

February 27, 1996

Honorable John T. Myers
Chairman
House Subcommittee on Appropriations for
Energy and Water Development
U. S. House of Representatives
2372 Rayburn House Building
Washington, D. C. 20515

Dear Congressman Myers:

At the momemnt, I do not plan to be with the delegation of the Alabama River Improvement Association, Inc. when you are in Washington.

I strongly support the Association requests for FY96. I am also a part of a collective effort to maintain and extend the waterway.

Work was suspended on the design and engineering on the Coosa Project in 1983, and I would like to see this resumed so it can be completed.

Since I am a farmer, I want to see lowered freight rates as manufacturers and farmers compete to improve our balance of payments. This is also of national interest, not only to farmers and manufacturers.

Waterways are so important as they provide efficient transportation productivity which lowers inflation and reduces national deficits which we desperately need to focus our attention on.

Honorable John T. Myers
Page 2
February 27, 1996

In my opinion, Congress should continue to support the study by the Corps of Engineers and Alabama/Georgia/Florida to resolve the two-basin water dispute in the region.

Your attention to the above matters would be greatly appreciated to all of us.

Very truly yours,

James T Jordan

James T. Jordan

CITY OF SELMA

SELMA, ALABAMA

OFFICE OF THE CITY COUNCIL

CARL C. MORGAN, JR.
PRESIDENT

WILLIAM C. ("Bill") KING
PRESIDENT PRO TEMPE

COUNCIL MEMBERS:

GLENN SEXTON
WARD 1

RITA SIMS FRANKLIN
WARD 2

JEAN T. MARTIN
WARD 3

NANCY G. SEWELL
WARD 4

MARK V. WEST
WARD 5

WILLIAM C. KING
WARD 6

McARTHUR WILLIAMS
WARD 7

YUSUF ABDUS-SALAAM
WARD 8

February 15, 1996

Honorable John T. Myers, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
328 Hart Senate Building
Washingtonm, D.C. 20215

Dear Honorable Myers,

The Mayor and the City Council of Selma, Alabama at the last council meeting, went on record as strongly supporting the Coosa-Alabama Association's requests for FY96. The city has recently completed a successful campaign to support our Economic Development Authority in their effort to expand our existing industries and to actively recruit new and relocating companies to our area. The location of a deep water port at Mobile and the operation of the Alabama Docks at that location are factors that greatly enhance the opportunities we can present to industrial prospects.

River traffic depends on timely and complete dredging of the waterway and the necessary maintenance for the Alabama River Channel cannot be over emphasized. In addition this maintenance and operation of the Alabama River waterway from Montgomery to Mobile by the Federal Government are essential to those industries in our area that are presently using river traffic.

Of great concern to all of us is the over emphasis that has been placed by provisions of the Endangered Species Act with regard to the Sturgeon, supposed to have been found in the river. We strongly support reasonable and balanced measures to protect our environment, but we feel Congress should take into consideration the economic impact to list a species as endangered as well as the mandatory designation of the habitat at the time the species is listed. Direction should be provided to the Fish and Wildlife Service to work objectively and share information with those charged with the listing process.

Thank you for your careful consideration of our thoughts and requests.

Sincerely,

Carl C. Morgan, Jr.
President of City Council

Monroe County Commission
MONROE COUNTY
P.O. BOX 8 • MONROEVILLE, ALABAMA 36461
(334)743-4107

SILAS O. TUCKER, District 1
CARLISLE McCLURE, District 2
ALEX ROBERTS, District 3
CHARLIE McCORVEY, JR., District 4

JUDGE OTHA LEE BIGGS
President

GLORIA MIDDLETON
Clerk & Purchasing Agent

"A County Older than the State"

February 19, 1996

Honorable John T. Myers, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
U.S. House of Representatives
2372 Rayburn House Building
Washington, D.C. 20515

Dear Congressman Myers,

The Monroe County Commission, Monroe County, Alabama, respectfully requests the approval for the FY 97 Appropriations for the maintenance and extension of the Coosa-Alabama Rivers Waterways. We are a part of a collective effort to maintain and extend this most important Rivers System that extends from Northwest Georgia through Alabama to the Port of Mobile.

The full economic benefits to the Southeastern part of the United States will not be realized until this Waterway System is fully navigable from Rome, Georgia to the Port of Mobile.

It is therefore requested that any increased user fees and taxes be discarded or substantially reduced as revenue generators, as increased user fees and taxes tend to stifle all businesses associated with Waterway activities. For this Waterway System to reach its full potential, design and engineering work on the Coosa Project which was suspended in 1983 should be resumed. Complete dredging and appropriate maintenance of the Alabama River Channel from Mobile Harbor is essential. Although we support the protection of our environment but particular emphasis should be put on consideration of economic impact of a proposed listing of endangered species at the time of listing. We further respectfully request that Federal Funding be provided to study how to make the lower Alabama River usable year round; that is, From Claiborne to Mobile.

Thank you for your favorable consideration for the FY97 appropriation request for the Coosa- Alabama Rivers System.

Respectfully submitted,

Otha Lee Biggs

Otha Lee Biggs, President
Monroe County Commission
Monroe County, Alabama

MONROEVILLE
AREA of CHAMBER
COMMERCE

POST OFFICE BOX 214 - MONROEVILLE, ALABAMA 36461 - (334) 743-2879

February 19, 1996

Honorable John T. Meyers, Chairman
House Subcommittee on Appropriations
Energy and Water Development
U. S. House of Representatives
2372 Rayburn House Building
Washington, D.C. 20515

Dear Representative Myers:

The Monroeville Area Chamber of Commerce is in support of the Coosa-Alabama River Improvement Association's funding requests for fiscal year 1997. Our board is part of a collective group with the common goal of maintaining and extending the waterway. As such, we represent our local employers whose interests in maintaining, improving and extending the waterway are vital to their economic survival and profitability. As a group whose chief focus is to recruit new industry to our region, the navigability of the Alabama River is critical to our success. We specifically request that Federal maintenance and operation of the Alabama River waterway from Mobile to Montgomery as well as Mobile Harbor be continued. In addition, the investment in a fourth dam in the area south of Claiborne would make the Alabama River useable year-round and would be a point of enhancement for our economic development efforts in this region. Waterways provide efficient transportion and productivity that lowers inflation and reduces national deficits. Enhancement of our local waterways will make our region more attractive to new and expanding industry.

In addition, during the reauthorization of the Endangered Species Act, the Congress should amend the Act to require the consideration of economic impacts in a decision to list a species as endangered or threatened, as well as mandatory designation of critical habitat at the time the species is listed. The threat to list the Alabama sturgeon as an endangered species threatens the economic livelihood of several of our area industries. Therefore we should like this law closely reviewed.

Thank you in advance for your consideration.

Respectfully submitted,

Sandy Smith

Sandy Smith, Executive Director

MONROE COUNTY INDUSTRIAL DEVELOPMENT BOARD
POST OFFICE BOX 214
MONROEVILLE, ALABAMA 36461

February 19, 1996

Honorable John T. Myers, Chairman
House Subcommittee on Appropriations
Energy and Water Development
U. S. House of Representatives
2372 Rayburn House Building
Washington, D.C. 20515

Dear Representative Myers:

The Monroe County Industrial Development Board is in support of the Coosa-Alabama River Improvement Association's funding requests for fiscal year 1997. Our board is part of a collective group with the common goal of maintaining and extending the waterway. As such, we represent our local employers whose interests in maintaining, improving and extending the waterway are vital to their economic survival and profitability. As a group whose chief focus is to recruit new industry to our region, the navigability of the Alabama River is critical to our success.

We specifically request that Federal maintenance and operation of the Alabama River waterway from Mobile to Montgomery as well as Mobile Harbor be continued. In addition, the investment in a fourth dam in the area south of Claiborne would make the Alabama River useable year-round and would be a point of enhancement for our economic development efforts in this region. Waterways provide efficient transportion and productivity that lowers inflation and reduces national deficits. Enhancement of our local waterways will make our region more attractive to new and expanding industry.

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Thank you in advance for your consideration.

Respectfully submitted,

Harvel Deas

Harvel Deas, Secretary-Treasurer

Selma and Dallas County Chamber of Commerce

513 LAUDERDALE ST. SELMA, AL 36702-9969 P.O. BOX DRAWER D (334) 875-7241

February 16, 1996

Honorable John T. Myers, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
U.S. House of Representatives
2372 Rayburn House Building
Washington, D.C. 20515

Dear Sir:

As one of the longtime proponents of the Coosa-Alabama River Waterway, the Selma-Dallas County Chamber of Commerce continues to solidly support development of this river system.

It is essential that studies continue for the entire system, but even more important that significant funding be allocated for keeping the present Alabama River channel open to shipping. Due to the nature of the architectural sands and gravels in the channel without such maintenance the channel becomes unusable for barge traffic and it becomes only a recreational waterway. Of course, we are pleased to have it for that use as well, but we need the best of both worlds.

We have also been involved in the opposition to having certain species added to the endangered list which we feel would effectively shut the waterway down and endanger our economic development efforts that are showing great success. At the same time, these additions would cost cities and towns along the waters millions of dollars in upgrading sewage treatment facilities, not to meet EPA standards, but to keep from disturbing the natural habitat of the endangered species. In determining additions to the endangered species list laws should be enacted to require that economic impact be considered.

During this time of budgeting tightening we understand that funds will be scarce but we also understand that there are certain areas where we can be foolish in not investing for the best return on the dollars spent.

Thank you for your consideration and support.

With Best Regards,

Jamie D. Wallace

JAMIE D. WALLACE
President

A COUNTY OLDER THAN THE STATE

ST. CLAIR COUNTY COMMISSION

P. O. BOX 397
ASHVILLE, ALABAMA 35953
TELEPHONE (205) 594-2100
FAX (205) 594-2110

ROY BANKS
CHAIRMAN

SUE C. WILSON
CLERK AND TREASURER

RANDALL DAVIES
JAMES ETHRIDGE
CHARLES FORD
JIMMY ROBERTS
ASSOCIATE MEMBERS

February 15, 1996

Coosa-Alabama River Improvement Assn., Inc
60 Commerce Street, Suite 1201
Montgomery, Alabama 36104-3563

Gentlemen:

Re: Congressional Hearings
February 27, 1996

Enclosed is resolution adopted by the Commission during a regular meeting held February 13, 1996, which is to be directed to:

The Honorable John T. Myers, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
U. S. House of Representatives
2371 Rayburn House Building
Washington, D. C. 20515

None of our Commission members will be able to attend the Hearings, but want to offer support for your efforts.

Sincerely,

Roy Banks (sw)

Chairman

RB/scw

Encl.

RESOLUTION

WHEREAS, the Coosa-Alabama River Improvement Association Congressional Hearings are scheduled to be held February 27, 1996, in Washington, D. C.; and

WHEREAS, pressure is great to reduce funding for waterway development and maintenance; and will, no doubt, affect waterways in Alabama; and

WHEREAS, extensive commitments to private investment on navigable waterways have been made on the assumption that Federal maintenance and operations of the waterways would be continued;

NOW THEREFORE BE IT RESOLVED, That the St. Clair County Commission go on record in support of the Coosa-Alabama River Improvement Association's requests for FY96;

FURTHER, That the Honorable John T. Myers, Chairman, House Subcommittee on Appropriations for Energy and Water Development; and the Honorable Pete V. Domenici, Chairman, Senate Subcommittee on Appropriations for Energy and Water Development; be forwarded a copy of said resolution adopted this date.

ADOPTED this 13 day of February, 1996.

ST. CLAIR COUNTY COMMISSION

Chairman

Randall Davis
Member

Member

Charles R.
Member

Member

Attest:

Sue C. Wilson
Clerk, St. Clair County
Commission

CITY OF MONROEVILLE
POST OFFICE BOX 147
Monroeville, Alabama 36461
(205) 575-2081

Anne H. Farish
MAYOR
Toni L. McKelvey
CITY CLERK

COUNCIL
Tommy Stacey
Billy Ghee
George Preyear
John E. Rice Sr.
Stewart Coaker

February 20, 1996

Honorable John T. Meyers, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
U. S. House of Representatives
2372 Rayburn House Building
Washington, D. C. 20515

Honorable Meyers,

I am writing on behalf of the City Council of the City of Monroeville, Alabama, to express our support of the Coosa-Alabama River Improvements Association, Inc. requests for FY97 in the following matters.

It is imperative to the citizens of Monroeville that timely and complete dredging and appropriate maintenance of the Alabama River is continued. It is our concern that listing the Alabama Sturgeon as an endangered species will prohibit some or all of the dredging necessary for commercial transportation on the Alabama River. Enough evidence has not been presented to establish that the Sturgeon still exists As long as there is a threat of this species being labeled endangered, industrial expansion is hindered in our community.

Congress should amend the Endangered Species Act to include reasonable, balanced measures to protect our environment, including valid scientific processes, extensive and definitive efforts to analyze the need to list endangered species, and logical provisions for maintaining the habitat of those species that actually need protection Particular emphasis should be put on consideration of economic impacts of a proposed listing at the time of listing.

During the reauthorization of the Endangered Species Act, the Congress should amend the Act to require the consideration of economic impacts in a decision to list a species as endangered or threatened as well as mandatory designation of critical habitats at the time the species is listed. In addition, the Congress should direct the Fish & Wildlife Service to develop procedures to objectively share information and specimens with parties closely related to the listing process.

I trust you will be sympathetic to Monroeville's concerns in this matter.

Very Truly Yours,

Anne H. Farish

Anne H. Farish
Mayor

ALABAMA RIVER PULP COMPANY, INC.

P.O. Box 100
Claiborne Mill
Perdue Hill, Alabama 36470
Telephone: (334) 575-2000

A2307 UL ISO 9002

February 27, 1996

Letter #GW96-65

Honorable John T. Myers, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
2372 Rayburn House Office Building
U.S. House of Representatives
Washington, D.C. 20515

Dear Sir:

My name is Glenn Wiegel. I am Manager of Traffic/Sales Distribution for the Alabama River Companies located on the Alabama River at Claiborne, Alabama.

We own and operate a docking/unloading facility on the Alabama River and in 1995 we received about sixteen (16) barge loads of fuel oil equivalent to roughly 320,000 barrels.

In the past we have loaded and shipped barge loads of woodpulp destined for the Port of Mobile. This practice was suspended, in part, due to the unreliability of river depth. A possible solution would be the construction of a new lock and dam south of Claiborne.

Increased user fees and taxes have a negative impact on the waterway use and we believe they should be discarded or reduced in order to lower the cost of freight and increase the volume.

We also believe the Endangered Species Act should be amended to more reasonable, balanced measures including valid scientific analysis and the consideration of economic impact of any proposed listing.

Yours very truly,

ALABAMA RIVER PULP COMPANY, INC.

Glenn G Wiegel

GLENN G. WIEGEL
MANAGER - TRAFFIC/DISTRIBUTION

GGW:jp

Mr. SAILORS. Mr. Chairman, one of the goals of our Association since its founding in 1890 has been to promote the economic well-being of the Coosa-Alabama river basin through development of a navigable waterway from Mobile through to Rome, Georgia. But we are having problems working toward that goal because of, among other things, the unreliability of navigation conditions on the river itself, specifically on the lower Alabama River below Claiborne Dam.

Historically, the authorized depth of nine feet is realized only about two-thirds of the time, a condition caused by low water levels due to drought and/or by constant shoaling and sedimentation at various points on the river. Over the past five years, the Corps of Engineers has expended an average of $2 million annually to dredge those trouble spots. A result of this unreliability is that it drives current users off and makes the waterway unattractive to new river-related industry searching for a site to relocate.

A month ago, a former user of the river, who had stopped waterway shipments in the early 1990s, informed us he wanted to reestablish waterway transportation to Montgomery and wondered if conditions below Claiborne Dam had improved. I had to tell him that the navigation reliability varied considerably from year to year but that the average remained between 65 and 70 percent. For example, in 1994, the river was below project depth only two weeks out of the year, but in 1993 project depth was available for only about one-half of the year.

I have a letter from the Montgomery Area Chamber of Commerce citing two instances in 1995 in which prospective businesses eliminated Montgomery as a relocation site because of the uncertainty of shipping conditions on the river. Who knows how many other prospects for relocation along the Alabama have never even so much as inquired because of the reliability? The impact of this is shown in the decrease of annual tonnage from 1.85 million in 1990 to 1.1 in 1994, and I don't expect 1995 to be any better.

There is a solution. The Corps of Engineers is in the midst of a reconnaissance study to determine Federal interest in constructing a low-lift, within-bank lock and dam at an appropriate site on the Alabama River. Initial projections estimate such a project would improve navigation reliability on the lower Alabama below Claiborne Dam to 90–95 percent, a significant improvement over current conditions. We strongly support this project. We cannot realistically expect to attract businesses that use river transportation without such an improvement. We ask for funding of $300,000 to enable the next step in the process, a feasibility study.

Thank you for the opportunity to bring this request to your attention, and thank you for gracing our annual meeting in Montgomery on February 16th.

Mr. BEVILL. Thank you very much.

[The statement of Mr. Sailors follows:]

MR CHAIRMAN

ONE OF THE GOALS OF OUR ASSOCIATION IS TO PROMOTE THE ECONOMIC DEVELOPMENT OF THE COOSA-ALABAMA RIVER BASIN, BUT WE ARE HAVING PROBLEMS WORKING TOWARD THAT GOAL BECAUSE OF, AMONG OTHER THINGS, THE UNRELIABILITY OF THE NAVIGATION CONDITIONS ON THE RIVER ITSELF. HISTORICALLY, THE AUTHORIZED DEPTH OF NINE FEET IS REALIZED ONLY ABOUT TWO-THIRDS OF THE TIME, A CONDITION CAUSED BY LOW WATER LEVELS DUE TO DROUGHT AND/OR BY CONSTANT SHOALING AND SEDIMENTATION AT VARIOUS POINTS ON THE RIVER. OVER THE PAST FIVE YEARS, THE CORPS OF ENGINEERS HAS EXPENDED AN AVERAGE OF TWO MILLION DOLLARS ANNUALLY TO DREDGE THOSE TROUBLE SPOTS. A RESULT OF THIS UNRELIABILITY IS THAT IT DRIVES CURRENT USERS OFF AND MAKES THE WATERWAY UNATTRACTIVE TO NEW RIVER-RELATED INDUSTRY SEARCHING FOR A SITE TO RELOCATE. A MONTH AGO, A FORMER USER OF THE RIVER, WHO HAD STOPPED WATERWAY SHIPMENTS IN THE EARLY 90'S, INFORMED US HE WANTED TO REESTABLISH WATERWAY TRANSPORTATION TO MONTGOMERY, AND WONDERED IF CONDITIONS BELOW CLAIBORNE DAM HAD IMPROVED. I HAD TO TELL HIM THAT THE NAVIGATION RELIABILITY VARIED CONSIDERABLY FROM YEAR TO YEAR, BUT THAT THE AVERAGE REMAINED BETWEEN 65 AND 70 PER CENT. FOR EXAMPLE, IN 1994, THE RIVER WAS BELOW PROJECT DEPTH ONLY TWO WEEKS OUT OF THE YEAR, BUT IN 1993, PROJECT DEPTH WAS AVAILABLE FOR ONLY ABOUT ONE-HALF OF THE YEAR. I HAVE A LETTER FROM THE MONTGOMERY AREA CHAMBER OF COMMERCE CITING TWO INSTANCES IN 1995 IN WHICH PROSPECTIVE BUSINESSES ELIMINATED MONTGOMERY AS A RELOCATION SITE BECAUSE OF THE UNCERTAINTY OF SHIPPING CONDITIONS ON THE RIVER. WHO KNOWS HOW MANY OTHER PROSPECTS FOR RELOCATION ALONG THE ALABAMA HAVE NEVER EVEN SO MUCH AS INQUIRED BECAUSE OF THE

RELIABILITY? THE IMPACT OF THIS IS SHOWN IN THE DECREASE OF ANNUAL TONNAGE FROM 1.85 MILLION IN 1990 TO 1.1 IN 1994 AND I DON'T EXPECT 1995 TO BE ANY BETTER. 1995

THERE IS A SOLUTION. THE CORPS OF ENGINEERS IS IN THE MIDST OF A RECONNAISSANCE STUDY TO DETERMINE FEDERAL INTEREST IN CONSTRUCTING A LOW-LIFT, WITHIN-BANK LOCK AND DAM AT AN APPROPRIATE SITE ON THE ALABAMA RIVER. INITIAL PROJECTIONS ESTIMATE SUCH A PROJECT WOULD IMPROVE NAVIGATION RELIABILITY ON THE LOWER ALABAMA BELOW CLAIBORNE DAM TO 90-95 PER CENT, A SIGNIFICANT IMPROVEMENT OVER CURRENT CONDITIONS. WE STRONGLY SUPPORT THIS PROJECT. WE CANNOT REALISTICALLY EXPECT TO ATTRACT BUSINESSES THAT USE RIVER TRANSPORTATION WITHOUT SUCH AN IMPROVEMENT. WE ASK FOR FUNDING OF $300,000 TO ENABLE THE NEXT STEP IN THE PROCESS, A FEASIBILITY STUDY.

THANK YOU FOR THE OPPORTUNITY TO BRING THIS REQUEST TO YOUR ATTENTION.

TUESDAY, FEBRUARY 27, 1996.

APALACHICOLA-CHATAHOOCHEE-FLINT INLAND WATERWAY SYSTEM

WITNESSES

REBECCA M. ROBINSON, EXECUTIVE DIRECTOR, TRI RIVERS WATERWAY DEVELOPMENT ASSOCIATION

SANDRA VANDAGRIFF CAMP, DEPUTY DIRECTOR, TRI RIVERS WATERWAY DEVELOPMENT ASSOCIATION

Mr. BEVILL. Next is Rebecca Robinson, Executive Director of the Tri Rivers Waterway Development Association, and Sandra Vandagriff Camp, Deputy Director.

We are delighted to have you two with us. We know—I don't know of any team that works better than you two together, and you are a real force, the two of you put together, so we are looking forward to your testimony. I notice that you are allocated 5 minutes. So take all the time you want up to 5 minutes.

Ms. VANDAGRIFF CAMP. Thank you, Chairman Bevill, Chairman Myers, Mr. Frelinghuysen. I am Sandy Vandagriff. I am the past Executive Director of the Tri Rivers Waterway Development Association.

Before we begin, I would like to thank you on behalf of the Tri Rivers Board of Directors and its membership for the opportunity to testify before you today.

I would like to add our appreciation to Chairman Bevill for the good works he has contributed to the State and the ACF waterway for many, many years. I speak for all our members and our associates in wishing you well and that you will be deeply missed, both of you. We were also surprised by your retirement today.

Now I would like to introduce our new Executive Director, Ms. Rebecca Robinson, who will present the testimony today.

Ms. ROBINSON. Chairman Myers and committee members, before I begin our testimony I would like to request that our oral and written testimony be included in the record.

Chairman Myers and distinguished committee members, it is a privilege to present the needs of the Apalachicola-Chattahoochee-Flint inland waterway and river system to you.

The Tri Rivers Development Waterway Association continues to hold as its objectives the effective development, utilization and maintenance of the ACF river system. The officers and members support not only commercial navigation and hydroelectric power generation but remain deeply concerned with the equitable use of this natural resource for all inhabitants of the tri-state area of southeast Alabama, southwest Georgia and northwest Florida.

We are here today to thank you for the funds you have provided in the past for the continued maintenance of the Apalachicola-Chattahoochee-Flint inland waterway and river system and request that you continue funding for fiscal year 1996–1997. Our funding request concerns the continued operation and maintenance of the ACF river system and its five multipurpose dams. These funds are estimated at level funding, fiscal year 1995–1996. They include:

Operation and maintenance of the ACF river system including George W. Andrews Lock, Dam and Lake; Jim Woodruff Lock, Dam and Lake Seminole; Buford Dam and Lake Sidney Lanier; Walter F. George Lock, Dam and Lake; West Point Dam and Lake, for a total amount of $28,200,000.

Mr. Chairman, Tri Rivers would like to reserve the right to add supplemental testimony should provisions prove to be necessary once the DOD budget is presented.

There are six public ports along the ACF, representing an investment of over $15 million. Moreover, there are millions of additional dollars invested in private facilities and industry operations. Navigation users and commercial interests are depending more on our waterway system for their transportation needs.

However, ACF users have observed serious shoaling caused by the extensive flooding from Tropical Storm Alberto in July, 1994, and then compounded by Opal last October. These natural disasters have caused significant changes in the shoaling patterns on the Chattahoochie River immediately above Jim Woodruff Dam, around Andrews Lock and Dam and the Flint River. These shoaling problems have become more and more serious and have necessitated additional dredging.

The Flint River, for example, was dredged for the first time ever in the spring of 1974 and was redredged, and five times the amount of the original quantity was removed. One year later Hurricane Opal aggravated the buildup, causing additional dredging to be needed. The U.S. Army Corps of Engineers could not meet the scheduled dredge projects elsewhere on the system.

The locks and dams themselves are in need of thorough inspections for maintenance of critical components. Jim Woodruff Lock and Dam is in particular need of significant rehabilitation, and the risk of a major shutdown is increasing at a rapid rate.

If the President's budget does not reflect funding for these improvements, we would like to request the right to add supplemental testimony.

In addition to and because of the dredging problems on the ACF system, commercial traffic has been significantly hindered and opportunities for increased tonnage have been missed. The U.S. Army Corps of Engineers has been unable to provide the congressionally authorized 9 by 100 foot channel, and oftentimes users must rely on navigation windows, which refers to the procedure of holding back water in the reservoir for a three- to four-week period, then releasing the water for 10 to 14 days. This limits barge movements to once a month if we are lucky.

This fact alone cost the ACF approximately 800,000 tons last year alone. The inability to move barges on a daily basis seriously jeopardizes improved economic developments in the region.

You may recall when Tri Rivers last provided testimony to this committee we faced an Endangered Species Act proposal to list seven species of fresh water mussels as endangered or threatened on the ACF. Since then Congress has passed and President Clinton signed a bill imposing a moratorium on listing of endangered or threatened species.

Tri Rivers supports the continuation of the moratorium on endangered species listings until the Congress has accomplished the

Endangered Species Act reauthorization process. It is our hope that a reauthorized Endangered Species Act will raise scientific standards in the implementation of that law to such a level that the people in our area will never again have to deal with listing proposals based on insufficient science and conjecture.

As a result of our previous request this committee stated in House Report——

Mr. BEVILL. If you can could you wrap it up now? Time has run out.

Ms. ROBINSON. I would just like to say thank you again for the opportunity to testify.

Mr. BEVILL. Thank you very much both of you. We appreciate the good job that you do.

Ms. VANDAGRIFF. Thank you. We appreciate the excellent job that you have done over the years and will miss you both very much. Hopefully, we will see you anyway and look to you for a little additional help later on. Thank you.

Mr. MYERS. Thank you.

[The statement of Ms. Robinson follows:]

STATEMENT
BEFORE THE
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
COMMITTEE ON APPROPRIATIONS
U.S. HOUSE OF REPRESENTATIVES

STATEMENT ON BEHALF
OF THE
APALACHICOLA-CHATTAHOOCHEE-FLINT
INLAND WATERWAY AND RIVER SYSTEM

BY

REBECCA M. ROBINSON

EXECUTIVE DIRECTOR

TRI RIVERS WATERWAY DEVELOPMENT ASSOCIATION

10:55 A.M. TUESDAY, FEBRUARY 27, 1996

STATEMENT OF THE
TRI RIVERS WATERWAY DEVELOPMENT ASSOCIATION

SUBMITTED BY

REBECCA M. ROBINSON, EXECUTIVE DIRECTOR

CHAIRMAN MYERS AND DISTINGUISHED COMMITTEE MEMBERS, IT IS A PRIVILEGE TO PRESENT THE NEEDS OF THE APALACHICOLA-CHATTAHOOCHEE-FLINT INLAND WATERWAY AND RIVER SYSTEM TO YOU.

I AM REBECCA M. ROBINSON, EXECUTIVE DIRECTOR OF THE TRI RIVERS WATERWAY DEVELOPMENT ASSOCIATION. OUR ASSOCIATION CONTINUES TO HOLD AS ITS OBJECTIVES THE EFFECTIVE DEVELOPMENT, UTILIZATION AND MAINTENANCE OF THE APALACHICOLA-CHATTAHOOCHEE-FLINT INLAND WATERWAY AND RIVER SYSTEM. THE OFFICERS AND MEMBERS SUPPORT NOT ONLY COMMERCIAL NAVIGATION AND HYDROELECTRIC POWER GENERATION, BUT REMAIN DEEPLY CONCERNED WITH WATER QUALITY, FLOOD AND EROSION CONTROL, WATER SUPPLY AND DROUGHT MANAGEMENT, RECREATION AND WILDLIFE ENHANCEMENT. IN SHORT, WE CONCERN OURSELVES WITH THE EQUITABLE USE OF THIS NATURAL RESOURCE FOR ALL INHABITANTS OF THE TRI-STATE AREA OF SOUTHEAST ALABAMA, SOUTHWEST GEORGIA AND NORTHWEST FLORIDA.

WE ARE HERE TODAY TO THANK YOU FOR THE FUNDS YOU HAVE PROVIDED IN THE PAST FOR THE CONTINUED OPERATION AND MAINTENANCE OF THE APALACHICOLA-CHATTAHOOCHEE-FLINT INLAND WATERWAY AND RIVER SYSTEM, AND REQUEST TO THAT YOU CONTINUE FUNDING FOR FISCAL YEAR 1996-97. OUR FUNDING REQUEST CONCERNS THE CONTINUED OPERATION AND MAINTENANCE OF THE ACF RIVER SYSTEM AND ITS FIVE MULTIPURPOSE DAMS. THESE FUNDS ARE ESTIMATED AT LEVEL FUNDING, FISCAL YEAR 1995-96. THEY INCLUDE:

OPERATION & MAINTENANCE OF THE ACF RIVER SYSTEM INCLUDING GEORGE W. ANDREWS LOCK, DAM AND LAKE	$ 4,300,000
JIM WOODRUFF LOCK, DAM AND LAKE SEMINOLE	$ 5,100,000
BUFORD DAM AND LAKE SIDNEY LANIER	$ 7,300,000
WALTER F. GEORGE LOCK, DAM AND LAKE	$ 6,400,000
WEST POINT DAM AND LAKE	$ 5,100,000

MR. CHAIRMAN, TRI RIVERS WOULD LIKE TO RESERVE THE RIGHT TO ADD SUPPLEMENTAL TESTIMONY, SHOULD REVISIONS PROVE TO BE NECESSARY, ONCE THE DEPARTMENT OF DEFENSE BUDGET IS PRESENTED.

THERE ARE SIX PUBLIC PORTS ALONG THE ACF WATERWAY REPRESENTING AN INVESTMENT OF OVER $15 MILLION. MOREOVER, THERE ARE MILLIONS OF ADDITIONAL DOLLARS INVESTED IN PRIVATE FACILITIES AND INDUSTRIAL OPERATIONS. NAVIGATION USERS AND COMMERCIAL INTERESTS ARE DEPENDING MORE AND MORE ON OUR GROWING WATERWAY SYSTEM FOR THEIR TRANSPORTATION NEEDS.

HOWEVER, ACF NAVIGATION USERS HAVE OBSERVED SERIOUS SHOALING CAUSED BY EXTENSIVE FLOODING FROM TROPICAL STORM ALBERTO IN JULY, 1994 AND THEN COMPOUNDED BY HURRICANE OPAL LAST OCTOBER. THESE NATURAL DISASTERS HAVE CAUSED SIGNIFICANT CHANGES IN THE SHOALING PATTERNS ON THE CHATTAHOOCHEE RIVER IMMEDIATELY ABOVE JIM WOODRUFF LOCK AND DAM, AROUND ANDREWS LOCK AND DAM, AND THE FLINT RIVER. THESE SHOALING PROBLEMS HAVE BECOME MORE AND MORE SERIOUS AND HAVE NECESSITATED ADDITIONAL DREDGING.

THE FLINT RIVER WAS DREDGED FOR THE FIRST TIME EVER IN THE SPRING OF 1994 AND WHEN IT WAS RE-DREDGED, FIVE TIMES THE AMOUNT OF MATERIAL WAS REMOVED SINCE THE FIRST DREDGING OCCURRED. ONE YEAR LATER, HURRICANE OPAL AGGRAVATED THE BUILD UP ORIGINALLY CAUSED BY ALBERTO AND HAS CREATED ADDITIONAL DREDGING NEEDS AT THESE AREAS, PREVENTING THE U.S. ARMY CORPS OF ENGINEERS FROM MEETING SCHEDULED DREDGE PROJECTS ELSEWHERE ON THE SYSTEM. FOR EXAMPLE, THE CHATTAHOOCHEE IS USUALLY DREDGED ON A TWO YEAR CYCLE, AND THE DREDGING REQUIRED BELOW COLUMBUS, GEORGIA WAS NOT COMPLETED. LIMITED FUNDS HAVE FORCED THE U.S. ARMY CORPS OF ENGINEERS TO DEFER DREDGE PROJECTS CREATING FURTHER PROBLEMS FOR THE NAVIGATION USERS AND COMMERCIAL INTERESTS RELYING ON THE SYSTEM.

INADEQUATE FUNDING HAS LEFT STRUCTURES FOR ALMOST TWENTY YEARS WITHOUT A SHUTDOWN FOR MAINTENANCE. THE LOCKS AND DAMS THEMSELVES ARE IN NEED OF THOROUGH INSPECTIONS FOR MAINTENANCE OF CRITICAL COMPONENTS SUCH AS KEY VALVES, MITER GATES AND SEALS, AND ELECTRONIC CONTROL SYSTEMS. JIM WOODRUFF LOCK AND DAM IS IN PARTICULAR NEED OF SIGNIFICANT REHABILITATION AND RISK OF A MAJOR SHUTDOWN IS INCREASING AT A RAPID RATE. IF THE PRESIDENT'S BUDGET DOES NOT REFLECT FUNDING FOR THESE IMPROVEMENTS, WE REQUEST THE RIGHT TO ADD SUPPLEMENTAL TESTIMONY SHOULD REVISIONS BE NECESSARY.

IN ADDITION TO, AND BECAUSE OF, THE DREDGING PROBLEMS ON THE ACF SYSTEM, COMMERCIAL TRAFFIC HAS BEEN SIGNIFICANTLY HINDERED AND OPPORTUNITIES FOR INCREASED TONNAGE HAS BEEN MISSED. THE U.S. ARMY CORPS OF ENGINEERS HAS BEEN UNABLE TO PROVIDE THE CONGRESSIONALLY AUTHORIZED 9 BY 100 FOOT CHANNEL AND OFTENTIMES NAVIGATION USERS MUST RELY ON "NAVIGATION WINDOWS". "NAVIGATION WINDOWS" REFERS TO THE PROCEDURE OF HOLDING BACK WATER IN THE RESERVOIRS FOR A THREE TO FOUR WEEK PERIOD, THEN RELEASING THE WATER FOR TEN TO FOURTEEN DAYS. THIS LIMITS BARGE MOVEMENTS TO ONCE A MONTH IF WE'RE LUCKY. THIS FACT ALONE HAS COST THE ACF SYSTEM APPROXIMATELY 800,000 TONS IN WOOD PRODUCTS, CLAY (BULK), COAL, AND MUNICIPAL SOLID WASTES (BALED) ALONE. SEVERAL OTHER COMMODITIES WERE LOST TO THE INLAND WATERWAY ONCE IT WAS LEARNED THAT THE CONDITION WAS WEEKLY MOVEMENTS. THE INABILITY TO MOVE BARGES ON A DAILY BASIS SERIOUSLY JEOPARDIZES IMPROVED ECONOMIC DEVELOPMENT IN THE REGION.

MR. CHAIRMAN, I WOULD LIKE TO DISCUSS, BRIEFLY, ANOTHER CRITICAL ISSUE NOW AFFECTING OUR RIVER SYSTEM. AS YOU MAY RECALL, WHEN TRI RIVERS LAST PROVIDED TESTIMONY TO THIS COMMITTEE, WE FACED AN ENDANGERED SPECIES ACT PROPOSAL TO LIST SEVEN SPECIES OF FRESHWATER MUSSELS AS ENDANGERED OR THREATENED ON THE ACF WATERWAY. SINCE THAT TIME, THE CONGRESS PASSED, AND PRESIDENT CLINTON SIGNED, A BILL IMPOSING A MORATORIUM ON THE LISTING OF ENDANGERED OR THREATENED SPECIES. WE UNDERSTAND THAT THIS LISTING MORATORIUM HAS BEEN RETAINED IN THE VARIOUS CONTINUING RESOLUTIONS ENACTED TO CONTINUE FUNDING FOR THE DEPARTMENT OF THE INTERIOR. AS A RESULT, THE FISH AND WILDLIFE SERVICE HAS NEITHER FINALIZED NOR WITHDRAWN THE SEVEN MUSSELS PROPOSAL, ALTHOUGH THAT PROPOSAL ORIGINALLY APPEARED IN THE FEDERAL REGISTER IN AUGUST 1994.

OVER THAT PAST YEAR AND A HALF, WE HAVE DISCUSSED THIS PROPOSED LISTING WITH THE SERVICE A NUMBER OF TIMES, AND HAVE RECEIVED SOME ASSURANCES FROM THE SERVICE THAT A FINAL LISTING WILL NOT IMPACT NAVIGATION OR DREDGING ON THE ACF. ALTHOUGH WE STILL HAVE SOME SERIOUS CONCERNS ABOUT THIS PROPOSAL, WE ARE PLEASED WITH THE SERVICE'S WILLINGNESS TO DISCUSS THESE ISSUES AND ATTEMPT TO CREATE SOLUTIONS AND AVOID FUTURE PROBLEMS. NEVERTHELESS, IT IS STILL OUR BELIEF THAT THE SERVICE SHOULD WITHDRAW THIS PROPOSAL UNTIL IT OBTAINS BETTER SCIENTIFIC INFORMATION. SCIENTISTS WORKING WITH THE TRI STATE MUSSELS COALITION RECENTLY CONCLUDED INDEPENDENT SCIENTIFIC STUDIES CALLING INTO QUESTION CRITICAL SCIENTIFIC ASSERTIONS MADE BY THE

SERVICE IN THE PROPOSAL. A PEER-REVIEWED REPORT DESCRIBING THESE STUDIES HAS BEEN ACCEPTED FOR PUBLICATION IN A SCIENTIFIC JOURNAL, AND WE WILL PROVIDE A COPY TO THIS COMMITTEE ONCE WE HAVE A FINAL COPY.

MR. CHAIRMAN, WE BELIEVE THE SEVEN MUSSELS PROPOSAL SERVES AS AN EXCELLENT EXAMPLE OF WHY THE ENDANGERED SPECIES ACT NEEDS TO BE REFORMED. IN ADDITION, WE SUPPORT THE CONTINUATION OF THE MORATORIUM ON ENDANGERED SPECIES LISTINGS UNTIL CONGRESS HAS ACCOMPLISHED THAT REFORM THROUGH THE ENDANGERED SPECIES ACT REAUTHORIZATION PROCESS. IT IS OUR HOPE THAT A REAUTHORIZED ENDANGERED SPECIES ACT WILL RAISE SCIENTIFIC STANDARDS IN THE IMPLEMENTATION OF THAT LAW TO SUCH A LEVEL THAT THE PEOPLE IN OUR AREA WILL NEVER AGAIN HAVE TO DEAL WITH LISTING PROPOSALS BASED ON SLOPPY SCIENCE AND CONJECTURE.

OVER THE PAST SEVERAL YEARS WE HAVE DISCUSSED WITH THIS COMMITTEE SEVERAL PROBLEMS WE HAVE BEEN HAVING ON THE ACF SYSTEM. FIRST, WAS THE OVERFLOW OF EXISTING DREDGE SITES ON THE APALACHICOLA RIVER. SECOND, OWNERSHIP OF ADJACENT LANDS BY THE STATE OF FLORIDA WHICH PRECLUDES THE ACQUISITION OF NEW LAND BY THE U.S. ARMY CORPS OF ENGINEERS. WE REQUESTED THAT THE U.S. ARMY CORPS OF ENGINEERS CONSIDER NEW AND DIFFERENT METHODS OF DISPOSAL, SUCH AS BEACH AND SHORELINE RENOURISHMENT. THIRD, WE ASKED THAT THE U.S. ARMY CORPS OF ENGINEERS, MOBILE DISTRICT, ASSURE USERS OF AN ADEQUATE CHANNEL DEPTH FOR AT LEAST 250 DAYS OF THE YEAR ON THE ACF SYSTEM, SO THAT ECONOMIC DEVELOPMENT GROUPS IN THE TRI STATE AREA CAN UTILIZE THE INLAND WATERWAY AS A UNIQUE MARKETING TOOL TO ATTRACT INDUSTRY. THIS STATEMENT WAS NECESSARY TO REASSURE POTENTIAL USERS OF THE RELIABILITY OF WATERWAY TRANSPORTATION ON THE ACF SYSTEM.

AS A RESULT OF OUR REQUESTS, THIS COMMITTEE STATED IN HOUSE REPORT 103-533, WHICH ACCOMPANIED THE FISCAL YEAR 1995 ENERGY AND WATER DEVELOPMENT APPROPRIATIONS BILL, "$100,000 TO COMPLETE A REPORT ON THE OBSTACLES THAT WOULD HAVE TO BE OVERCOME IN ORDER TO ACHIEVE A 250-DAY NAVIGATION SEASON ON THE ACF SYSTEM. THE REPORT SHOULD INCLUDE A EXAMINATION OF NEW AND INNOVATIVE METHODS OF DREDGE DISPOSAL, INCLUDING BEACH AND COASTLINE RENOURISHMENT, AND SHOULD BE PROVIDED TO THE COMMITTEE PRIOR TO TESTIMONY ON THE FISCAL YEAR 1996 BUDGET." THIS REPORT IS VERY IMPORTANT TO THE FUTURE DEVELOPMENT OF THE ACF SYSTEM. THE PRELIMINARY REPORT WAS ATTACHED TO OUR TESTIMONY LAST YEAR. THE FINAL REPORT IS INCLUDED THIS YEAR. WE REQUEST THAT YOU REVIEW THIS REPORT AND URGE THE U.S. ARMY CORPS OF ENGINEERS TO

IMPLEMENT THEIR FINDINGS.

ALTHOUGH THE U.S. ARMY CORPS OF ENGINEERS REPORT DISCUSSED THE DREDGE DISPOSAL PROBLEM, WE WOULD LIKE TO BRING TO YOUR ATTENTION ONE POSSIBLE SOLUTION. THE TRI RIVERS SYSTEM FLOWS THROUGH THE STATES OF ALABAMA, GEORGIA AND FLORIDA. FLORIDA IS THE ONLY STATE OUT OF THE THREE WHICH REQUIRES LOCAL SPONSORSHIP INSTEAD OF FEDERAL. THE SIX COUNTIES ALONG THE WATERWAY IN FLORIDA HAVE BEEN FINANCIALLY UNABLE TO ACT AS SPONSORS AND THE STATE OF FLORIDA HAS REFUSED, POTENTIALLY JEOPARDIZING THIS FEDERAL INVESTMENT. WE REQUEST THAT AN AMENDMENT BE MADE TO THE AUTHORIZATION WHICH WOULD ALLOW THE FEDERAL GOVERNMENT TO TAKE OVER SPONSORSHIP. ONLY CONGRESS HAS THE POWER TO MAKE THIS MUCH NEEDED IMPROVEMENT TO OUR SYSTEM. BY MODIFYING THE ACT, THE APALACHICOLA RIVER SEGMENT OF THE ACF WOULD BE CONSISTENT WITH OTHER INLAND WATERWAYS IN THE NATION. BUT MOST IMPORTANTLY, BY ACHIEVING FEDERAL SPONSORSHIP WE COULD SOLVE MANY OF OUR DISPOSAL PROBLEMS.

ON BEHALF OF OUR MEMBERS AND SUPPORTERS OF APALACHICOLA-CHATTAHOOCHEE-FLINT INLAND WATERWAY AND RIVER SYSTEM I WOULD LIKE TO THANK YOU FOR GIVING ME THIS OPPORTUNITY TO TESTIFY TODAY. WE ARE GRATEFUL FOR YOUR LEADERSHIP AND COMMITMENT TO KEEP OUR INLAND WATERWAY SYSTEMS AS VIABLE ENTITIES TO OUR NATION'S ECONOMY.

HOUSE OF REPRESENTATIVES
ALABAMA STATE HOUSE
MONTGOMERY, ALABAMA 36130

DISTRICT NO. 86
HOUSTON COUNTY

JOE R. CAROTHERS, JR.
2916 TAYLOR ROAD
DOTHAN, ALABAMA
36301
HOME 334/792-3060
MONTGOMERY 334/242-7772

COMMITTEES:
WAYS AND MEANS
LOCAL GOVERNMENT
NAVIGATION AND WATER WAYS

February 12, 1996

The Honorable John Myers, Chairman
Subcommittee on Energy and Water Development
U.S. House of Representatives
2372 Rayburn House Office Building
Washington, D.C. 20515

Dear Representative Myers,

Since 1960, The Tri-Rivers Waterway Development Association has done an outstanding job of promoting the development, maintenance, and utilization of the Apalachicola-Chattahoochee-Flint River System.

Having been in the Alabama House of Representatives since 1974, I am well aware of the demands made on tax dollars for projects and services. However, I can assure your committee that I have not seen any organization that has done more to wisely use monies than Tri-Rivers. Our waterways are in real trouble and we must have reliable and effective organizations to insure their survival.

I would appreciate very much your committee's favorable consideration of Tri-Rivers request for continued funding for their vital services.

Sincerely,

Joe R. Carothers Jr.

Joe R. Carothers, Jr.

JRCjr/bbc

Development Authority
of Bainbridge and Decatur County

January 25, 1996

Honorable John Myers
Chairman
Subcommittee on Energy and Water Development
U S. House of Representatives
2372 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman Myers:

The Tri-rivers Waterway Development Association will be appearing before your Subcommittee in the near future requesting funding for Fiscal Year 1997 I encourage your support of this request as this organization continues to lead efforts to protect and develop the Tri-Rivers System. Inland waterway development is of vital importance to this area of the country and, in particular, to this community. Bainbridge and Decatur County is home to one of only two inland ports in the state of Georgia and many of our industrial citizens rely on the river system as a cost effective and reliable means of transporting raw materials and finished products. The river system is also of vital importance in the attraction of new jobs to rural areas of the region.

Your favorable review of Tri-River's request is appreciated.

Sincerely,

Matt Trice
Executive Director

P.O. Box 736 • Bainbridge, Georgia 31717
(912) 246-4774 (800) 243-4774 FAX (912) 243-7633

AUTHORITY Raymond Miles, *Chairman*, Kermit F Bates, Jr., *Vice Chairman*, James O Hines, Jack Leverett, D D S., Sam Griffin, Marvin Hall; Matt Trice, *Executive Director*

White Paper Division

307 West Industrial Road
Jackson, Alabama 36545
205/246-4461
Fax: 205/246-7643

Boise Cascade

February 15, 1996

Honorable John T. Myers, Chairman
Subcommittee on Appropriations for Energy and Water Development
US House of Representatives
2372 Rayburn House Office Building
Washington, DC 20515

Dear Representative Myers;
I am very much aware that funding at both the State and Federal levels has come under unprecedented scrutiny. However, the importance of continued Federal funding for the Apalachicola-Chattahoochee-Flint Inland Waterway and River System is very much a concern to us. As a member of a collective effort to maintain and develop the waterway, we support the Tri River's funding request of fiscal Year 1997.

Please give you utmost support to this effort. Thank you in advance for your attention to this issue.

sincerely,

James G. DeWitt

James G. DeWitt
Public Relations Manager

Boise Cascade

Paper Division

Jackson Mill
307 West Industrial Road
Jackson, Alabama 36545
334/246-4461
Fax: 334/246-7632

February 2, 1996

The Honorable John Myers, Chairman
Subcommittee on Appropriations for Energy and Water Development
U.S. House of Representatives
2372 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman Myers:

The maintenance and development of the inland waterways and river systems are important to the operation of the Boise Cascade Corporation's paper mill and sawmill located at Jackson, Alabama. The inland waterways provide a safe and economical means of shipping large volumes of product used and produced by our industry.

We support the funding request by the TRI RIVERS Association for the continued maintenance and development of the ACF River System by the U. S. Army Corps of Engineers for the fiscal year 1996.

Sincerely,

James R. Lowe

James R. Lowe
Forester

**CARGILL
MARKETING
CO., INC.**

*200 Dunlap Drive
Mobile, AL 36602
Mail Address: PO Box 161429
Mobile, AL 36616-2429
205/434-0780
FAX 205/434-0789*

February 27, 1996

The Honorable John T. Myers, Chairman
Subcommittee on Energy and Water Development
U.S. House of Representatives
2372 Rayburn House Office Building
Washington, D.C. 20515

Dear Mr. Myers:

Cargill Marketing operates two barge loading grain elevators on the Apalachicola-Chattahoochee-Flint Inland Waterway and River System. This System enables us to reach major grain export markets and helps to provide competitive grain marketing alternatives to local farmers.

We support the effort to maintain and develop the waterway and the funding request now before the subcommittee for FY 1997. Maintenance of this system combined with the resurgence of world grain demand will have a very positive impact on local agriculture.

We look forward to your support in funding this system's need.

Sincerely,

CARGILL MARKETING CO., INC.

Bruce A Weinard

Bruce A. Weinard, President

The City of Dothan

POST OFFICE BOX 2128
DOTHAN, ALABAMA
36302
334/793-0100

BOARD OF COMMISSIONERS

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PRESIDENT MAYOR

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COMMISSIONER, DISTRICT 1

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COMMISSIONER DISTRICT 4

STEVE STOKES
COMMISSIONER, DISTRICT 5

HAYNE HOLLIS
COMMISSIONER DISTRICT 6

JERRY L GWALTNEY
CITY MANAGER

January 23, 1996

The Honorable John Myers, Chairman
Subcommittee on Appropriations for
Energy and Water Development
U. S. House of Representatives
2372 Rayburn House Office Building
Washington, D.C. 20515

Dear Representative Myers:

I want to take this opportunity to express the City of Dothan, Alabama's support for the continued funding of the Apalachicola-Chattahoochee-Flint Inland Waterway and River System.

The Apalachicola-Chattahoochee-Flint River System is one of the most important natural resources in Southeast Alabama, Southwest Georgia, and Northwest Florida. Communities in the Tri-States area depend on these rivers for recreation, power generation, drinking water, and industrial processing. In addition, these rivers make up the largest system of navigable waters in our area. By providing access to the Intracoastal Waterway System, this river system makes it possible for farmers, manufacturers, and others to receive bulk raw materials and supplies and to transport bulk goods to domestic and foreign markets in the most cost efficient manner.

Since the earliest days of the Republic, the development and maintenance of the nation's inland waterways have been vital to America's growth. The support of you and your colleagues for the continued development and maintenance of the Apalachicola-Chattahoochee-Flint Inland Waterway and River System will enable Dothan its sister communities to continue to grow and prosper.

Sincerely,

Alfred Saliba

Alfred Saliba
Mayor

AS/DWH/dkw

HUB OF THE WIREGRASS

PEANUT CAPITAL OF THE WORLD

DOTHAN
ALABAMA

January 23, 1996

The Honorable John Myers, Chairman
Subcommittee on Energy and Water Development
U. S. House of Representatives
2372 Rayburn House Office Building
Washington, DC 20515

Dear Representative Myers:

The Chattahoochee, Choctawhatchee and Pea Rivers are very important resources to Southeast Alabama. The preservation and maintenance of these bodies of water are important to the well being of more than a half million residents in the Wiregrass Region. The Dothan Area Chamber of Commerce is one member of the Southeast Alabama Council on Economic Development that supports the Tri Rivers Waterway Development Association in this effort. Therefore, on behalf of my Board of Directors I respectfully request that you support this organization's funding for 1997. These funds are essential to their existence and the operation of their duties.

Sincerely,

Jim Reichardt
President

DOTHAN AREA
CHAMBER OF COMMERCE
440 Honeysuckle Road
Post Office Box 638
Dothan, AL 36302
(334) 792-5138
(800) 221-1027
FAX (334) 794-4796

EAST JACKSON COUNTY
ECONOMIC
DEVELOPMENT
COUNCIL, INC.

P.O. Box 739
Sneads, FL 32460
(904) 593-6451

February 16, 1996

The Honorable John Myers, Chairman
Subcommittee on Energy and Water Development
U. S. House of Representatives
2372 Rayburn House Office Building
Washington D. C. 20515

Dear Chairman Myers:

The East Jackson County Economic Development Council was formed three years ago to promote the sound advancement of our part of Jackson County (Florida) with the goal being more and better job opportunities for its citizens.

The foundation on which we have built our program is the Apalachicola-Chattahoocee-Flint Waterway. We are urging the full development of this system in inland barge transportation and in recreation. With this in mind, we wish to state that we fully support the continued funding of the system.

Respectfully submitted:

Homer B. Hirt, Jr.
Chairman

Georgia Ports Authority

P O Box 2406, Savannah, Georgia 31402
(912)964-3811

February 23, 1996

The Honorable John Myers, Chairman
Subcommittee on Energy and Water Development
U.S. House of Representatives
2372 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Myers:

The Georgia Ports Authority operates two in-land barge facilities. These two terminals depend on the Apalachicola-Chattahoochee-Flint (ACF) River System as their connection to the Gulf of Mexico. Many companies find these barge facilities are the most cost-efficient manner of transporting their goods. Some would be unable to remain in business if this type of transportation was unavailable.

Therefore, the Georgia Ports Authority supports the Tri Rivers' funding request for Fiscal Year 1997.

Thank you for your consideration.

Sincerely,

Charles F. Griffen, P.E.
Director, Port Planning and
Harbor Development

cv

cc: Ms. Rebecca M. Robinson, Tri Rivers Waterway
Development Association

Deepwater Terminals / Savannah, Brunswick
Barge Terminals / Bainbridge, Columbus
Trade Development Offices / Savannah, Brunswick Atlanta
New York, Tokyo, Japan, Athens, Greece, Oslo, Norway

MARK TAYLOR
District 12
Post Office Box 1156
Albany, Georgia 31702
(912)883-5200

109 State Capitol
Atlanta, Georgia 30334
(404)651-7738

The State Senate
Atlanta, Georgia 30334

ADMINISTRATION FLOOR LEADER

COMMITTEES:
Appropriations
Ethics
Insurance and Labor
Reapportionment
Rules
Transportation, Secretary

February 13, 1996

Honorable John Myers, Chairman
Subcommittee on Energy & Water Development
U. S. House of Representatives
2372 Rayburn House Office Building
Washington, D. C. 20515

Dear Mr. Chairman:

I am writing this letter on behalf of the members of the Tri Rivers Waterway Development Association. This association represents a concerted effort of several groups who are cooperating to manage a tri-state waterway system. In light of the severe damage caused by several natural disasters in 1995, the delicacy of that waterway system is exposed even further. This is in terms of environmental damage as well as human suffering. The importance of continuing adequate funding for the Tri Rivers Association cannot be overstated.

As a state legislator, I am all too familiar with the difficulties in finding money for a multitude of worthy programs, but as a representative of the people who will directly benefit from this funding, I ask that you give careful consideration to this worthwhile project.

Sincerely,

Mark Taylor
State Senator, District 12

MT:sb

Homer B. Hirt, Jr.

Telephone 904/593-6495
Fax 904/663-4822

Transportation Consultant
Post Office Drawer 709
Sneads, Florida 32460

February 1, 1996

The Honorable John Myers, Chairman
Subcommittee on Energy and Water Development
U. S. House of Representatives
2372 Rayburn House Office Building
Washington, D. C. 20515

Dear Chairman Myers:

This letter is in support of continuing maintenance and development of the Apalachicola-Chattahoochee-Flint Waterway, and the funding of the waterway in the upcoming fiscal year.

In my position as a transportation consultant in the area served by the ACF Waterway, I see daily the benefits brought to the economy and the inhabitants of southeastern Alabama, southwestern Georgia and north Florida. Barges bring in agricultural needs such as fertilizer, gypsum and nitrates, and carry out the products of the fields, forests and mines of the area, giving access to world markets. Proper maintenance of the navigation channel allows for safe, economical movements of these products in an environmentally sound mode, unequaled by any other methods.

Sincerely,

Homer B. Hirt, Jr.

CHAIRMAN
ROBERT CROWDER
5426 W. St. Hwy. 52
Dothan, Alabama 36301

BOARD OF COMMISSIONERS

WYLIE C. YELVERTON
1402 Carver Drive
Dothan, Alabama 36303

HOMER JUNIOR AMAN
2262 S. County 33 Rd.
Ashford, Alabama 36312

FRANCES M. COOK
102 Berry Patch Lane
Dothan, Alabama 36301

MARK S. CULVER
306 Montezuma Ave.
Dothan, Alabama 36303

HOUSTON COUNTY COMMISSION

January 24, 1996

The Honorable John Myers, Chairman
Subcommittee on Energy and Water Development
U. S. House of Representatives
2372 Rayburn House Office Building
Washington, DC 20515

Dear Representative Myers:

I am sure you are aware, the Tri-Rivers Waterway Development Association was established in 1960 and is the only non-profit, tri-state organization which promotes the effective development, utilization and maintenance of the Apalachicola-Chattahoochee-Flint River System.

As Chairman of the Houston County Commission, and on behalf of the 83,000 citizens of Houston County, I would like to request your support of continued Federal funding, for Fiscal year 1997, of the Appalachicola-Chattahoochee-Flint Inland Waterway and River System

Your continued support and interest in the maintenance and future development of the Tri-Rivers Inland Waterway and River System is greatly appreciated.

Sincerely,

Robert Crowder
Chairman

RC/lm

P O. DRAWER 6406 • DOTHAN, ALABAMA 36302 • TELEPHONE 334/677-4740 • FAX 334/794-6633

February 6,1996
P.O. Box 100
Lower Peach Tree
Alabama, 36751

The Honorable John Myers, Chairman
Subcommittee on Energy and Water Development
U. S. House of Representatives
2372 Rayburn House Office Building
Washington, D.C. 20515

Dear Representative Myers;

I an writing to you on behalf of the TRI Rivers Waterway Development Association Appropriation request for 1997.

I joined the association in 1994. I am a land owner, row crop and woodlands in Houston County, Alabama. The work that is being done by the association are certainly benefiting the economic and social development of the people of the TRI State River Basin.

By funding the Tri River Association I believe that many people will benefit by the accomplishments of their work.

The TRI River Basin has not reached the true potential of use of this excellent waterway. Only through continued focus by an interested association can this potential be reached.

Again your consideration is requested to fund the association again in 1997.

Sincerely,

Bill

Bill Irby

JACKSON
County

BOARD *of* COUNTY COMMISSIONERS

Administration Building
2864 Madison Street
Marianna, Florida 32446

February 16, 1996

The Honorable John Myers, Chairman
Subcommittee on Energy and Water Development
U.S. House of Representatives
2372 Rayburn House Office Building
Washington, D.C. 20515

RE: TRI RIVERS' FUNDING - FISCAL YEAR 1997

Dear Representative Myers:

I am writing on behalf of the Jackson County Board of County Commissioners, Marianna, Florida, to express support for the Tri Rivers' Funding Request for Fiscal Year 1997.

As Chairman of the Jackson County Board of County Commissioners, I urge you to continue support for the future development and maintenance of the Tri Rivers' Waterway System.

Thank you for your consideration in this very important matter.

Sincerely,

Willie E Spires

Willie E. Spires
Chairman, Jackson County Board
of County Commissioners

WES:gk

c: Jackson County Board of County Commissioners
Tri Rivers' Waterway Development System
File

Departments: Administration • Building • Emergency Mgt. • Fire & Rescue • 911 • Personnel • Planning • Purchasing

Phone (904) 482-9633 • EQUAL/AFFIRMATIVE ACTION EMPLOYER • Fax (904) 482-9643 • SC 789-9633

Stevenson & Palmer
Engineering
INCORPORATED

February 6, 1996

The Honorable John Myers, Chairman
Subcommittee on Energy and Water Development
U.S. House of Representatives
2372 Rayburn House Office Building
Washington, D.C. 20515

Dear Representative Myers:

The maintenance and development of the Apalachicola-Chattahoochee - Flint River systems is being effectively promoted by the Tri- Rivers Waterway Development Association. In South Georgia and South Alabama we are currently involved in the Corps of Engineers "ACF/ACT Water Study". The Corps is performing a broad-based three year study of the Tri-State water issues. The Tri-Rivers Association has been actively involved in this study and should be allowed to continue in its efforts.

I realize that all funding requests are being carefully analyzed, and I agree that all federal and state funding agencies should have to justify their continued existence. Because the Tri-Rivers Association affects so many people in both Alabama and Georgia, and because they are an important voice in the on-going Corps of Engineers study, I support the Tri-Rivers Waterway Development Association's funding request for fiscal Year 1997. The continued viability of the ACF inland waterway and river system is important to the citizens of south Georgia.

Sincerely,

STEVENSON & PALMER ENGINEERING, INC.

Kenneth R Hatcher
Kenneth R. Hatcher
President

cc: Rebecca M. Robinson (Tri-Rivers Association)

KRH/mms

2200 West Town Road / Albany, Georgia 31707 / Telephone (912) 883-0332 / Fax (912) 883-0543

TIDELAND BARGE COMPANY
3200 ROBERTA ST., SUITE 16
P.O. BOX 8261
METAIRIE, LOUISIANA 70011

(304) 883-3260

February 20, 1996

The Honorable John Myers, Chairman
Subcommittee on Energy and Water Development
U.S. House of Representatives
2372 Rayburn House Office Building
Washington, DC 20515

RE: Request for Continued Funding,
Tri Rivers Waterway
Development Association

Dear Representative Myers:

This is a request that funding requested by the above referenced Association be reported out favorably from your subcommittee.

Our company, which is engaged in inland waterways transportation of bulk liquid chemicals, utilizes the Apalachicola, Chattahoochee and Flint River system in the delivery of those products to distributors and end-users. The continued existence of that waterway system in a navigable condition is essential to our being able to deliver that service. The Tri Rivers Waterway Development Association is the only organized voice that we have to spearhead the continued maintenance and development of that river system.

Thank you, and with kindest regards, I am

Very truly yours.,
TIDELAND BARGE COMPANY

GENE DRAKE
President

CED:g
cc File
Tri Rivers Waterway Development Association

YOUNG REFINING CORPORATION • P O Box 796 Douglasville GA 30133 (404) 942 2343

January 30, 1996

The Honorable John Myers, Chairman
Subcommittee on Energy and Water Development
U. S. House of Representatives
2372 Rayburn House Office Building
Washington, D. C. 20515

Dear Sir:

This letter is to express Young Refining's strong support for the Tri-Rivers Waterway Development Association effort to maintain and develop the Apalachicola-Chattahoochee-Flint River System.

As a small refiner located 20 miles west of Atlanta, this system has been very vital to us in bringing crude oil from the Gulf Coast and shipping products back to the Gulf. I see this system as being more crucial to the area it serves in the future.

Your efforts toward the successful fiscal year 1997 funding for this organization will be greatly appreciated.

Sincerely,

YOUNG REFINING CORPORATION

Dewey E. Southers

Dewey E. Southers
Executive Vice President

DES/ESMc

Gulf Power Company
500 Bayfront Parkway
Post Office Box 1151
Pensacola, FL 32520-0328
Telephone 904 444-6236

Gulf Power
the southern electric system

M L Gilchrist
Manager of Fuel and Environmental Affairs

February 22, 1996

Honorable John T. Myers, Chairman
Subcommittee on Energy and Water Development
U.S. House of Representatives
2372 Rayburn House Office Building
Washington, D.C. 20515

Dear Representative Myers:

This letter is written to express the support of Gulf Power Company for the Tri Rivers Waterway Development Association. The purpose of the Tri Rivers organization is to promote the maintenance and effective development of the Apalachicola-Chattahoochee-Flint Inland Waterway and River System.

Gulf Power's electrical service territory covers nine counties in the western most portion of the Florida panhandle and one of Gulf's three electric generating plants is located on the Apalachicola River. Therefore, we are obviously interested in any action or decision which may potentially impact utilization of the waterway.

In order to allow Tri Rivers to continue its important work, we also wish to express our support for the association's request for continued Federal funding. Thank you for your consideration of this matter.

Sincerely,

ML Gilchrist

cc: Rachel Terry
Jim Vick

"Our business is customer satisfaction"

Mr. MYERS. This concludes Alabama day. We have run over slightly, but I think you all understand the appreciation you folks from Alabama show for Tom Bevill, as we all do, and appropriately you have said nice words about him. I don't think we want to cut that short.

We do appreciate each of you for the job you have done, and the delegation you send here always works very closely together. That is very important. You will never know how important unless you sit on this side of the dais.

[Written statements of Senator Richard Shelby and Senator Howell Heflin follow:]

RICHARD SHELBY
ALABAMA

COMMITTEE ON APPROPRIATIONS
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS
SELECT COMMITTEE ON INTELLIGENCE
SPECIAL COMMITTEE ON AGING

110 HART BUILDING
WASHINGTON, DC 20510-0103
(202) 224-5744

United States Senate
WASHINGTON, DC 20510-0103

STATE OFFICES:

1800 FIFTH AVENUE NORTH
321 FEDERAL BUILDING
BIRMINGHAM AL 35203
(205) 731-1384

HUNTSVILLE INT'L AIRPORT
1000 GLENN HEARN BOULEVARD
BOX 20127
HUNTSVILLE AL 35824
(205) 772-0460

113 ST JOSEPH STREET
438 U S COURTHOUSE
MOBILE AL 36602
(334) 694-4164

15 LEE STREET
B28 U S COURTHOUSE
MONTGOMERY AL 36104
(334) 223-7303

1118 GREENSBORO AVENUE #240
TUSCALOOSA, AL 35401
(205) 759-5047

STATEMENT OF SENATOR RICHARD SHELBY ON BEHALF OF THE COOSA-ALABAMA RIVER SYSTEM AND THE WARRIOR TOMBIGBEE WATERWAY FOR THE HOUSE SUBCOMMITTEE ON APPROPRIATIONS FOR ENERGY AND WATER DEVELOPMENT

FEBRUARY 27, 1996

Mr. Chairman, I appreciate this opportunity to offer testimony on behalf of the Coosa-Alabama River System and the Warrior-Tombigbee Waterway.

The Coosa-Alabama River Improvement Association has requested FY 1997 funding for continued operation and maintenance of the Waterway in the amount of 43.7 million dollars. This is an effort that has the unqualified support of the Alabama Congressional Delegation and the membership of the Coosa-Alabama River Improvement Association. I support this request in view of the specific needs and priorities the Association has set forth: (1) operations and maintenance funding for the Coosa-Alabama basins as well as Mobile Harbor (2) continued funding for a fourth lock and dam study on the Alabama River (3) reopening the Coosa River Navigation Project and (4) continued support for the comprehensive basin water management study.

The Warrior Tombigbee Waterway is also an integral part of Alabama's commerce. The Warrior Tombigbee Development Association has been a leading proponent in the development of the Warrior-Tombigbee Waterway, which now has modern and standardized locks throughout its length. However, the Association has specified needs to maintain the on-going projects and efficiency of the Waterway. The Association request for operations and maintenance funding in FY 1997 for the Black Warrior-Tombigbee Waterway is $16.3 million. I would like to point out that this is three percent less than the administration goal but that this should keep navigation capability at a minimum level.

Although the Association did not ask for additional capability last year, they feel such capability is important to the continuing improvements that have been postponed. For this reason they are requesting $4.6 million to fund these improvements which include: upland disposal sights, mooring cells, and equipment for locks.

Like the Coosa-Alabama River Improvement Association, the Warrior-Tombigbee Development Association feels the Mobile Harbor is very important to the state of Alabama and would appreciate any and all support for the Harbor.

I believe the Coosa-Alabama Waterway system and the Warrior Tombigbee Waterway system are solid investments in future productivity and economic progress. Extensive commitments to private investment on navigable waterways have been made on the assumption that federal maintenance and operation of the waterways would continue. I pledge my continued support for this important project which holds such promise of economic benefit.

Thank you Mr. Chairman for the opportunity to offer testimony to this distinguished subcommittee on behalf of the Coosa-Alabama River System and the Warrior-Tombigbee Waterway.

ENERGY AND WATER APPROPRIATIONS SUBCOMMITTEE TESTIMONY

SENATOR HOWELL HEFLIN

FUNDS FOR THE APALACHICOLA-CHATTAHOOCHEE-FLINT WATERWAY

FISCAL YEAR 1997

FEBRUARY 27, 1996

Howell Heflin

MR. CHAIRMAN, I WANT TO THANK YOU FOR THE OPPORTUNITY TO APPEAR BEFORE THIS SUBCOMMITTEE ON BEHALF OF THE APALACHICOLA-CHATTAHOOCHEE-FLINT INLAND WATERWAY AND RIVER SYSTEM. DUE TO YOUR BUSY AGENDA, I ASSURE YOU THAT MY STATEMENT WILL BE BRIEF.

MR. CHAIRMAN, I RESPECTFULLY REQUEST THAT YOU APPROVE FUNDS FOR THE OPERATION AND MAINTENANCE OF FIVE MULTI-PURPOSE DAMS ON THE APALACHICOLA-CHATTAHOOCHEE-FLINT (ACF) WATERWAY SYSTEM. THE FUNDING REQUIRED FOR THESE PROJECTS ARE AS FOLLOWS:

GEORGE W. ANDREWS LOCK, DAM, AND LAKE	$4,300,000
JIM WOODRUFF LOCK, DAM AND LAKE SEMINOLE	$5,100,000
BUFORD DAM AND LAKE SIDNEY LANIER	$7,300,000
WALTER F. GEORGE LOCK, DAM AND LAKE	$6,400,000
WEST POINT DAM AND LAKE	$5,100,000

THERE IS ANOTHER ISSUE THAT I HOPE THE COMMITTEE WILL GIVE FAVORABLE CONSIDERATION. AS YOU WILL HEAR IN THE TESTIMONY GIVEN TODAY BY REBECCA M. ROBINSON OF THE TRI-RIVERS WATERWAY DEVELOPMENT ASSOCIATION, THE STATE OF FLORIDA IS THE ONLY STATE ALONG THE ACF WATERWAY SYSTEM WHICH REQUIRES LOCAL SPONSORSHIP INSTEAD OF

FEDERAL. I ASK THAT YOU PLEASE LOOK INTO OPTIONS WHICH WOULD ALLOW THE FEDERAL GOVERNMENT TO TAKE OVER SPONSORSHIP.

IN CLOSING, THERE ARE SIX PUBLIC PORTS ALONG THE ACF WATERWAY REPRESENTING AN INVESTMENT OF $15 MILLION. MOREOVER, THERE ARE MILLIONS OF ADDITIONAL DOLLARS INVESTED IN PRIVATE FACILITIES AND INDUSTRIAL OPERATIONS. NAVIGATION USERS AND COMMERCIAL INTERESTS ARE DEPENDING MORE AND MORE ON THE ACF WATERWAY SYSTEM FOR THEIR TRANSPORTATION NEEDS. THEREFORE, I URGE YOUR FAVORABLE CONSIDERATION OF THE TESTIMONY TO BE PRESENTED TODAY BY REBECCA M. ROBINSON.

THANK YOU, MR. CHAIRMAN.

ENERGY AND WATER APPROPRIATIONS SUBCOMMITTEE TESTIMONY

SENATOR HOWELL HEFLIN

FUNDS FOR THE WARRIOR-TOMBIGBEE WATERWAY

FISCAL YEAR 1997

FEBRUARY 27, 1996

Howell Heflin

MR. CHAIRMAN, I WOULD LIKE TO THANK YOU FOR THIS OPPORTUNITY TO APPEAR BEFORE YOUR SUBCOMMITTEE ON BEHALF OF THE WARRIOR-TOMBIGBEE DEVELOPMENT ASSOCIATION.

I RESPECTFULLY REQUEST THAT THE COMMITTEE SUPPORT TWO APPROPRIATION ITEMS FOR FY97: OPERATIONS & MAINTENANCE (O&M) AND ADDITIONAL CAPABILITY FUNDS TOTALING $20,965,000. THIS INCLUDES NEAR LEVEL O&M FUNDING OF $16.3 MILLION AND ADDITIONAL CAPABILITY FUNDING OF $4.65 MILLION.

ACCORDING TO INFORMATION I HAVE BEEN GIVEN, THE ASSOCIATION DEVELOPED THEIR OWN BUDGET AMOUNT FOR THE OPERATIONS AND MAINTENANCE PROGRAMS FOR FY96 DUE TO THE FACT THAT THEY WILL NOT HAVE ANY INFORMATION ON THE PROPOSED FY97 BUDGET FOR THE CORPS OF ENGINEERS UNTIL LATE MARCH. AS SUCH, THEY ARRIVED AT THE ABOVE FIGURES BY USING THE EXPERIENCE DATA FOR PRIOR RECENT YEARS AND THEIR KNOWLEDGE OF WHICH O&M PROJECTS REQUIRE ADDITIONAL FUNDING IN ORDER FOR WORK TO CONTINUE ON A REASONABLE SCHEDULE.

THIS LEVEL OF FUNDING IS NECESSARY TO SUPPORT THE DAY-TO-DAY

O&M PROGRAM AND TO CONTINUE ON-GOING IMPROVEMENT PROJECTS IN THE APPROACHES AND FENDER SYSTEM TO THE BRIDGE AT JACKSON, ALABAMA, ON THE TOMBIGBEE RIVER, TO CONTINUE PURCHASING CRITICAL UPLAND DISPOSAL SITES FOR DREDGED MATERIALS, AND CONSTRUCTION OF DIKES. IN ADDITION, MOORING CELLS AT DEMOPOLIS AND COFFEEVILLE LOCKS AND STOPLOGS FOR OLIVER LOCK AND DAM ARE NEEDED.

BASED ON THE ABOVE INFORMATION, I FEEL THAT THE ASSOCIATION'S REQUEST FOR $20,965,000 FOR OPERATIONS & MAINTENANCE AND ADDITIONAL CAPABILITY FUNDS IS REASONABLE. THEREFORE, I SUPPORT THE WARRIOR-TOMBIGBEE DEVELOPMENT ASSOCIATION'S REQUEST, AND I ASK FOR THE COMMITTEE'S FAVORABLE CONSIDERATION.

THANK YOU, MR. CHAIRMAN.

ENERGY AND WATER APPROPRIATIONS SUBCOMMITTEE TESTIMONY

SENATOR HOWELL HEFLIN

FUNDS FOR THE TENNESSEE-TOMBIGBEE WATERWAY

FISCAL YEAR 1997

FEBRUARY 27, 1996

Howell Heflin

MR. CHAIRMAN, ON BEHALF OF THE TENNESSEE-TOMBIGBEE WATERWAY DEVELOPMENT AUTHORITY, I RESPECTFULLY REQUEST FAVORABLE CONSIDERATION OF THE AUTHORITY'S BUDGET REQUESTS.

WHILE THE LEVEL OF FUNDING RECOMMENDED BY THE ADMINISTRATION IS NOT KNOWN AT THIS TIME, I REQUEST THAT YOU APPROVE THIS YEAR'S LEVEL OF FUNDING FOR FY97 AND AN ADDITIONAL $3.7 MILLION BE APPROPRIATED TO ACCOMPLISH PART OF THE $5.5 MILLION OF THE DEFERRED O&M WORK. COMPLETE DEFERRAL WOULD EVENTUALLY RESULT IN MAJOR REHABILITATION COSTS LATER ON.

IN ADDITION, I REQUEST THAT $3 MILLION BE APPROVED TO CONTINUE ENGINEERING AND DESIGN WORK ON A NEW LOCK AT KENTUCKY DAM ON THE TENNESSEE RIVER. EVENTUAL CONSTRUCTION OF THIS LOCK WILL RELIEVE ONE OF THE WORST BOTTLENECKS IN THE ENTIRE WATERWAY SYSTEM. THIS LEVEL OF FUNDING WILL PERMIT CONSIDERATION OF THE PROJECT AS A NEW CONSTRUCTION START BY THE YEAR 2000.

I SUPPORT THE PROJECTS ALONG THE TENNESSEE-TOMBIGBEE WATERWAY, AND I URGE THE COMMITTEE TO APPROVE THE REQUESTED FUNDING SET FORTH TODAY.

ENERGY AND WATER APPROPRIATIONS SUBCOMMITTEE TESTIMONY

SENATOR HOWELL HEFLIN

FUNDS FOR THE NORTHPORT, ALABAMA, FLOOD CONTROL LEVEE

FISCAL YEAR 1997

FEBRUARY 27, 1996

Howell Heflin

Mr. Chairman, on behalf of the City of Northport, Alabama, I would like to voice my support for the Continuing Authority Program, Section 205 of the Flood Control Act of 1948. More specifically, I request this Subcommittee's support of the Northport Flood Control Levee, a project for which detail design was scheduled to begin this year under the Section 205 Program.

A feasibility study, which was cost-shared by the City of Northport, Alabama, was completed in June 1995. Review of the report was completed and the final report was submitted on October 13, 1995. The report recommended construction of a levee approximately 12 feet in height and about 2.1 miles in length. The levee would provide protection to about 325 businesses and residences and eliminate 92% of the average annual flood damages.

In addition, the Northport Flood Control Levee is the keystone of the Northport Renaissance Plan for redevelopment of the river margin. Flooding from the Black Warrior River has severely hampered Northport's growth for over 150 years. Construction of the levee will eliminate this deterrent to growth and, thus, is the first step toward development of the Renaissance Plan and redevelopment of the river margin.

In sum, this project is of the utmost importance to the City of Northport. Therefore, on behalf of the City of Northport, I am asking for the Subcommittee's support in making this project a reality by supporting the Continuing Authority Program, Section 205 of the Flood Control Act of 1948.

Thank you, Mr. Chairman.

ENERGY AND WATER APPROPRIATIONS SUBCOMMITTEE TESTIMONY

SENATOR HOWELL HEFLIN

FUNDS FOR THE COOSA-ALABAMA WATERWAY

FISCAL YEAR 1997

FEBRUARY 27, 1996

Howell Heflin

MR. CHAIRMAN, THANK YOU FOR THE OPPORTUNITY TO APPEAR BEFORE THIS SUBCOMMITTEE ON BEHALF OF THE COOSA-ALABAMA RIVER IMPROVEMENT ASSOCIATION. BECAUSE OF YOUR CROWDED AGENDA, MY REMARKS WILL BE BRIEF.

MR. CHAIRMAN, I AM OF THE OPINION THAT WE MUST PROTECT THE NATION'S TRANSPORTATION INFRASTRUCTURE FROM EXPEDIENT BUDGET CUTS. AS A NATION, WE HAVE INVESTED A LOT OF TIME AND MONEY IN THE DEVELOPMENT OF OUR WATERWAY INFRASTRUCTURE, AND I THINK THE RETURN ON OUR INVESTMENT HAS FAR EXCEEDED EXPECTATIONS.

HAVING SAID THAT, I RESPECTFULLY REQUEST THE COMMITTEE'S SUPPORT IN MAINTAINING THE OPERATIONS AND MAINTENANCE FOR PROJECTS IN THE COOSA-ALABAMA RIVER SYSTEM AND IN MOBILE HARBOR AT LEVELS EQUAL TO THAT OF FY96. IN THE ALABAMA-COOSA RIVER BASIN, EXISTING RIVER PROJECTS AND FACILITIES SUPPORT THE COMMERCIAL NAVIGATION, HYDROPOWER, AND RECREATIONAL ACTIVITIES SO CRITICAL TO THE REGION'S ECONOMY. THEREFORE, THE FIRST PRIORITY MUST BE THE O&M FUNDING THAT PERPETUATES THOSE PROJECTS, INCLUDING CONTINUED REHABILITATION OF EXISTING FACILITIES, MAINTENANCE DREDGING, AND MODIFICATION OF TRAINING DIKES.

IN ADDITION, TO OPERATIONS AND MAINTENANCE FUNDING, I REQUEST YOUR SUPPORT FOR THE FOLLOWING:

(1) FUNDING THE STUDY OF A FOURTH LOCK AND DAM ON THE ALABAMA RIVER;

(2) REOPENING THE COOSA NAVIGATION PROJECT;

(3) RESISTING ANY ATTEMPT TO RAISE USER FUEL TAXES ON THE INLAND RIVER NAVIGATION INDUSTRY; AND

(4) CONTINUED SUPPORT FOR THE COMPREHENSIVE BASIN MANAGEMENT STUDY.

I SUPPORT THE PROJECTS OF THE COOSA-ALABAMA RIVER IMPROVEMENT ASSOCIATION, AND I URGE THE COMMITTEE TO GIVE FAVORABLE CONSIDERATION TO THEIR REQUESTS.

THANK YOU, MR. CHAIRMAN.

ENERGY AND WATER APPROPRIATIONS SUBCOMMITTEE TESTIMONY
SENATOR HOWELL HEFLIN
TVA'S ENVIRONMENTAL RESEARCH CENTER
FISCAL YEAR 1997
FEBRUARY 27, 1996

Howell Heflin

MR. CHAIRMAN, I WOULD LIKE TO TAKE THIS OPPORTUNITY TO THANK YOU AND THE SUBCOMMITTEE FOR YOUR SUPPORT OF TVA'S ENVIRONMENTAL RESEARCH CENTER OVER THE YEARS AND TO REQUEST YOUR CONTINUED SUPPORT. I WILL MAKE A FEW, BRIEF COMMENTS ON BEHALF OF THE CENTER.

IT IS A WELL KNOWN FACT THAT TVA ONCE CONDUCTED THE NATION'S MOST EFFECTIVE PROGRAM IN DEVELOPING NEW FERTILIZER AND NUTRIENT TECHNOLOGIES THAT HAS FUELED THE LEGENDARY GAINS IN FOOD AND FIBER PRODUCTION IN THE U.S. AND AROUND THE WORLD. BECAUSE OF THIS WORK, TVA IS LARGELY RESPONSIBLE FOR THE TREMENDOUS SUCCESS OF U.S. AGRICULTURE.

DURING THE DECADES TVA CONDUCTED ITS FERTILIZER AND AGRICULTURAL RESEARCH PROGRAMS, IT BUILT A STRONG BASE OF EXPERTISE IN CHEMISTRY, CHEMICAL ENGINEERING, PROCESS ENGINEERING, AGRONOMY, AND OTHER RELATED AGRICULTURAL AND NUTRITIONAL SCIENCES. NOW TVA IS CAPITALIZING ON THIS EXPERTISE IN DEVELOPING TECHNOLOGIES TO SOLVE ENVIRONMENTAL WASTE PROBLEMS IN THE TENNESSEE VALLEY AS WELL AS ACROSS THE NATION.

TODAY, TVA'S ENVIRONMENTAL RESEARCH CENTER IS ON THE THRESHOLD OF DISCOVERING NEW WAYS TO PREVENT OR REDUCE POLLUTION OF THE AIR, LAND, AND WATER FROM AGRICULTURAL, MUNICIPAL, AND INDUSTRIAL OPERATIONS. FOR OUR NATION TO ACHIEVE AGRICULTURAL AND ECONOMIC SUSTAINABILITY, WE MUST HAVE INNOVATIVE TECHNOLOGIES TO OPERATE OUR FARMS, FACTORIES, UTILITIES, AND CITIES IN ENVIRONMENTALLY ACCEPTABLE WAYS.

THE RESEARCH AND DEVELOPMENT UNDERWAY AT THE ENVIRONMENTAL RESEARCH CENTER CAN HELP US AVOID A CRISIS IN MANAGING AND DISPOSING OF OUR AGRICULTURAL, MUNICIPAL, AND INDUSTRIAL WASTES. IN FACT, SOME OF THE ENVIRONMENTAL RESEARCH CENTER'S TECHNOLOGIES ARE ALREADY IN USE THROUGHOUT THE COUNTRY IN CLEANING UP CONTAMINATED SITES, REDUCING POLLUTION FROM AGRICULTURAL BUSINESS OPERATIONS, AND CONVERTING WASTES INTO VALUE-ADDED PRODUCTS.

MR. CHAIRMAN, BECAUSE OF TODAY'S BUSY SCHEDULE, I WILL NOT CITE THE MANY AREAS OF RESEARCH UNDERWAY AT THE CENTER, NOR GO INTO DETAIL ON THE MANY BENEFITS THE CENTER'S WORK WILL HAVE ON THE ENVIRONMENT. SUFFICE IT TO SAY THAT THE WORK BEING CONDUCTED AT THE ENVIRONMENTAL RESEARCH CENTER IS ESSENTIAL FOR THE ENVIRONMENTAL QUALITY OF OUR COUNTRY IN THE FUTURE, AND IT DESERVES YOUR CONTINUED SUPPORT.

THANK YOU, MR. CHAIRMAN.

TUESDAY, FEBRUARY 27, 1996.

OHIO RIVER NAVIGATION SYSTEM

WITNESS

R. BARRY PALMER, EXECUTIVE DIRECTOR, DINAMO

Mr. MYERS. Next, we have the Executive Director of DINAMO, Barry Palmer. Your complete statement will be placed in the record and you may proceed as you would like.

Mr. PALMER. Thank you, Mr. Chairman and Mr. Bevill. I guess we are out in the Midwest or the Mid-Atlantic States—I come from Pittsburgh, and we noticed that when you announced your retirement that we sent a lot of precipitation this way. It was the waterways interests of America with great sobbing and tears in our eyes that turned into snow by the time it got here. I think all of us who are involved in the waterways industry are going to find we will sorely miss you both. You have been gigantic leaders for the water resource development of this Nation over your careers. We wish you well.

Mr. MYERS. We appreciate your affection, but wish you would have thought of a better way of showing it.

Mr. PALMER. Thank you for your help, particularly last year, with the new construction start of the McAlpine Lock and Dam. The Corps wants to get engaged in a ground-breaking ceremony on July 12. We hope you might be—that is their date. We are going to have a delayed, a ground-breaking at the Olmstead Lock and Dam next month, but would hope that McAlpine, Mr. Chairman, you might be able to be there. You both, and you particularly, Mr. Chairman, gave a lot of support to that.

Thirteen of our original 16 locks and dams on the Ohio River Navigation System are under construction or complete and we have another three projects involving five locks and dams that are remaining. We want to thank you for your help on the Kentucky Lock Addition Project and getting those additional monies last year.

But I am here to ask for some special help with the next project that we would like to get under construction, the Marmet Locks and Dams. It is the second lock and dam on the Kanawha River in West Virginia. We are testifying tomorrow for the Marmet project and the Kentucky Lock Addition Project and hope they get authorized this year.

Concurrently, we need to see if we can work with you folks to get a new construction start or limited authorization just to enable the real estate acquisition activities at Marmet. The problems are tremendous congestion. We have delays at that facility of 6½ hours. This is a project that has been through the planning process a number of years ago. You can see that the average tow configuration is five jumbos and a towboat and takes five lockages to get through Marmet. There is a great deal of commonality of traffic between Marmet, Winfield and the Robert C. Byrd Lock and wind sea locks and dams.

The major problem is that the real estate acquisition activities are going to have to take place over four years and we need a total of $5 million, about a $1.5 million to complete the design of the project and another $3.5 million to initiate the real estate acquisition. There will be 234 houses affected. The residents see that the construction of a new lock is tied to their future. They are supportive of that. They are asking Congressman Wise and the Corps, this involves Bob Wise's district, to see if we can proceed forward and acquire the land. They are supportive of that.

We are going to need 21, 22 million dollars to acquire all the land in the next four years. It will take 4 years. Every year that this project is, we don't have any money nor real estate acquisition, you will delay the final date at which the project is completed. Even if we started and complete this project tomorrow, it still will have tremendous traffic delays until we get a final projection. So we will need help.

I think the administration will be helpful in a lot of areas this year with Kentucky lock addition. This probably, depending on the budget, would be the singular area where we are going to need your help. We would like to work with you and the authorizing committees to see if we might be able to get some kind of limited authorization and a total of $5 million so we can move into this real estate acquisition component of the project. Thank you for your help again over the years. We are going to miss you both. Thanks for the opportunity to present testimony here this morning.

Mr. MYERS. Thank you.

[The statement of Mr. Palmer follows:]

DINAMO
Three Gateway Center
Pittsburgh, PA 15222
(412) 392-4550

The Association
for the Development
of Inland Navigation in
America's Ohio Valley

Written Statement

presented to

US House of Representatives Appropriations Subcommittee on Energy and Water Development

R. Barry Palmer
Executive Director
DINAMO
The Association for the Development of Inland Navigation in America's Ohio Valley

Three Gateway Center
14th Floor
Pittsburgh, PA 15222
(412) 392-4551

Tuesday, February 27, 1996

a heritage of promoting lock and dam improvements since 1895

Mr. Chairman and Members of the Subcommittee:

I am Barry Palmer, Executive Director of DINAMO, the Association for the Development of Inland Navigation in America's Ohio Valley. DINAMO is a multi-state, membership based association of business and industry, labor, and state government leaders from throughout the Ohio Valley, whose singular purpose is to expedite the modernization of the lock and dam infrastructure on the Ohio River Navigation System. Largely through the leadership of this subcommittee and the professional efforts of the US Army Corps of Engineers, we in the Ohio Valley are beginning to see the results of 15 years of continuously hard work in improving our river infrastructure. We know that you both, Mr. John Myers and Mr. Tom Bevill, have announced your retirement from public office at the end of this election cycle. We want to acknowledge and express our gratitude for the tremendous support given to us in the Ohio Valley throughout both of your distinguished careers in the House of Representatives.

We are here before this distinguished subcommittee today to request funding of lock and dam modernization objectives in the Ohio Valley in accordance with the full capability of the US Army Corps of Engineers. Since we do not yet have the President's Budget for FY 1997 or any clear delineation of the capability of the Corps to execute modernization objectives, we are relying on the information provided in the Project Management Plans or the Project Executive Summary Reports (which are public information) in determining the level of expenditures needed for each project. For FY 1997 DINAMO is requesting funding for each project as follows:

Recommendations for Fiscal Year 1997:

1. For the Robert C. Byrd Locks and Dam modification project, formerly the Gallipolis Locks and Dam on the Ohio River, OH/WV, about $15,000,000 for continued construction.

2. For the Winfield Lock Replacement on the Kanawha River, WV, $33,000,000, for continued construction. This amount reflects an estimate of monies identified in the Project Management Plan for construction of the new lock less those monies estimated for HTRW clean-up, which is now being funded by the previous owner of the property.

3. For the Olmsted Locks and Dam, replacing Locks and Dams 52 and 53 on the Lower Ohio River, IL/KY, $80,000,000, for continued construction. The lock contract was awarded recently for about $224 million and is scheduled to be completed in three years. Continued design and engineering of the remaining elements of the project will also be required.

4. For improvements to Monongahela River Locks and Dams 2,3 & 4, PA, $18,700,000, for continued construction, as identified in the Project Management Plan.

5. For the McAlpine Lock Project on the Ohio River, IN/KY, about $9,000,000 to continue construction.

6. For the Marmet Lock Replacement on the Kanawha River, WV, a total of $5,000,000, with about $1.6 million to complete Pre-Construction Engineering and Design (PED), with the balance to be spent in a construction account for real estate acquisition and related activities associated with the project.

7. For the Kentucky Lock Addition on the Tennessee River, KY, $3,000,000 to continue Pre-Construction Engineering and Design. During the previous five years the Administration provided no monies for this project. Within the last several months, however, the Assistant Secretary of the Army for Civil Works approved the Kentucky Lock Reevaluation Report. Approval of this report means that the project is now eligible for immediate budgetary consideration and authorization.

8. For the Ohio River Mainstem Study, including studies related to modifications of Uniontown, Newburgh, and Cannelton Locks and Dams, $9,000,000. This level of funding is needed to complete the feasibility studies leading to an authorization report enabling construction of additional capacity for the Uniontown, Newburgh, and Cannelton Locks and Dams, Ohio River, IN/KY. Also the Corps of Engineers needs to initiate studies to determine where additional improvements may be needed in future years along the Ohio River Navigation System.

You will note, Mr. Chairman, that **we are requesting $5,000,000, in construction funding for the Marmet Lock Replacement. Since the Marmet project is not currently authorized for construction, but is at the point in its development where the Corps of Engineers could initiate acquisition of real estate, it is important that the Committee provide a "limited authorization" and adequate funding to enable the Corps of Engineers to proceed with the next step prior to construction of the new lock.**

The existing Marmet Locks and Dam is located in a highly populated area, and the proposed Marmet Lock has significant social impacts. An estimated 129 acres of real estate would be acquired in West Belle, including 71 acres of vacant land. Included would be 234 residential and 10 commercial units. Although alternative lock plans which would reduce the impact on the nearby residential communities were studied by the Corps, all other alternatives either do not provide satisfactory navigation conditions or have a much higher cost. Hence, design of the new lock plan has focused on limiting real estate acquisitions to the minimum necessary for construction.

A community advisory committee, led by Congressman Bob Wise, has been keeping the community informed of developments in the Marmet study. It is our understanding that **there is a general consensus among the residents that the new lock is essential to the local industrial base and to insure jobs in the region**. Most affected residents plan to relocate within a few miles of their present location, and most of the businesses expressed a desire to reopen in the general area. **Many affected residents are concerned about further delays and are anxious for land acquisition to begin**. DINAMO is sympathetic and appreciative of the concern of affected residents and comes to the committee today to ask for help in expediting the necessary real estate plans related to the project.

In addition to the concern of affected residents regarding delays, the condition of the existing Marmet Locks necessitates speedy action. Real estate activities in conjunction with this project must take place over a four year time period, and the total costs for acquisition of real estate are estimated at $21.3 million. Also for each year when there is no real estate activity, the completion date for the project would slip one year. The project is included in S 640, the Senate's version of the Water Resources Development Act of 1996, which is currently on the Senate calendar. The House has scheduled hearings on its version of the water resources bill for this year, and we know the Administration supports construction authorization of the Marmet project.

The Marmet Lock and Dam on the Kanawha River in West Virginia is currently part of the Kanawha River Navigation Study initiated by the Congress in 1977. DINAMO's members have worked closely with the Corps of Engineers throughout all phases of the planning, design and engineering of this project, as we have with other projects under investigation and construction in the region.

To improve present and future navigation conditions at Marmet Locks and Dam on the Kanawha River, DINAMO supports the recommendation of the Huntington District Engineer, approved by the Chief of Engineers, US Army Corps of Engineers, to construct a new 110' x 800' lock landward of the existing twin 56' x 110' locks. The plan includes continued operation of the existing lock chambers. The cost of this improvement is estimated at $239.2 million for the new lock and $10.7 million for rehabilitation of the existing dam. The recommended plan has a benefit-to-cost ratio of 2.85 to 1. The proposed improvement to Marmet is the National Economic Development (NED) plan, a mandate to promote economic growth while reducing the federal deficit. The NED plan must maximize net annual benefits while taking into consideration future traffic demand, the cost of building and maintaining improvement alternatives, and cost comparisons of alternative modes.

Construction of the new Robert C. Byrd Locks (dedicated in November 1992) and rehabilitation of the dam and construction of a new 110' x 800' lock (groundbreaking in Spring 1988) at Winfield Locks and Dam dictate construction of a new lock at Marmet Lock and Dam. The commonality of traffic that passes through Marmet , Winfield, and Robert C. Byrd is extraordinarily high. For example, about 99 percent of all commodities moving through Marmet (upbound and downbound) also moves through Winfield, and 55 percent of commodities moving through Marmet moves through Robert C. Byrd.

From 1982 to 1994 tonnage at Winfield increased by 9 million tons -- from 13 million to 22.3 million. Tonnage at Marmet during the same period increased 10 million tons -- from 7.2 million to 17.4 million. Total lock processing times for a normal tow at Winfield during this time increased from 4.2 hours to 10.7 hours. Delays at Marmet also increased over the same period from 2 hours total processing time in 1982 to 6.4 hours in 1994. Hence the congestion problems currently experienced at Winfield, which are also expected to increase with increased traffic demand, will only be shifted upstream to Marmet after the new lock at Winfield is completed.

The Marmet Lock is an important link in the economy of the Kanawha Valley. Traffic at Marmet is composed largely of coal produced in the upper Kanawha Basin and destined for electric generating facilities and coking plants throughout the middle and upper Ohio River Basin. Some traffic moves to points as distant as Houston, Texas, and St. Louis, Missouri. In 1994 coal accounted for approximately 93 percent of the total tonnage.

Marmet traffic is projected to grow at an annual rate of 3 percent through 2000 before slowing to 1.1 percent through 2050. Much of this growth is attributable to the Clean Air Act

Amendments of 1990, which require coal-using electric generating plants either to install scrubbers, use advancer technologies to clean coal, or blend coals to reduce sulfur content. The coal fields of West Virginia are rich in low and medium-sulfur coal, and the Kanawha River is a crucial transportation artery to move this coal to market.

Three potential navigation problems have been investigated for Marmet: structural stability, limited lock capacity, and channel restrictions within the Marmet pool. Structural problems with the lock walls could result in lengthy unscheduled lock closures; limited lock capacity causes excessive traffic delays and increases the cost of transportation; and channel restrictions could increase the tow trip time or restrict tow sizes.

The existing Marmet Locks are 62 years old and in advanced stages of deterioration. The project has many signs of distress as evidenced by significant misalignment of the guide and guard walls, general deteriorated condition of the concrete, and unsatisfactory performance of the lock wall appurtenances. Traffic projections indicate that the number of lockages over the next fifty years will be approximately three times that experienced in the last fifty years. With the projected increase in traffic and age of the project, deterioration is expected to accelerate. However, simply rehabilitating the old locks does not solve the real problem -- limited capacity.

Limited capacity at the existing facility results in excessive delays and increased transportation costs. The old 56' x 360' locks at Marmet will accommodate three standard barges (175' x 26' each) and a towboat. But the chambers hold only one jumbo barge (195' x 35' each) with a towboat. Jumbos are currently the largest component of the Kanawha River barge fleet and the use of jumbo barges requires five lockages. Jumbo barges are used on long-haul movements where the inefficiencies of using jumbos are offset by the efficiency of using them elsewhere on the navigation system. With the completion of the larger lock at Winfield, standard barges will continue to lose their economic advantage and the use of jumbo barges is expected to increase. This shift will also aggravate the delays at Marmet.

Physical features along the river such as bends, bridges, and narrow channels that could restrict two-way traffic were also studied as part of the Marmet Feasibility Report. However, it was concluded that channel improvements are not economically justified because of the infrequency of tows meeting in one-way zones.

Environmental impacts of the selected plan were considered two categories: 1) construction impacts at the lock site and approach areas and 2) river system impacts resulting from changes in tow traffic and tow configurations. The lock will have direct environmental impacts at the construction site on terrestrial habitat, wetland and river bed. However, on-site mitigation measures will essentially restore the site's natural resource values after construction is complete. River system impacts were analyzed using a new planning tool, the Navigational Predictive Analysis Technique (NAVPAT), which show an adverse effect to aquatic habitat. Proposed mitigation includes isolating nearshore areas with breakwaters along portions of the Marmet pool shoreline to enhance habitats for fish. This mitigation is expected to cost $3.5 million.

Finally, Mr. Chairman, I would like to conclude by restating the importance of the investments made on our nation's waterways, investments in people, investments in infrastructure, investments in America. The inland waterways are both a model and a methodology for what works. It has been this nation's investment in inland navigation that has allowed the interior regions to compete with other regions on a more level playing field. For instance, the coal in the West Virginia mountains has always been there. But without transportation this coal is valueless. Transportation to market gives value to coal, ores, and raw materials. The less that transport to market costs, the more value it adds -- an vice-versa.

Commerce, like water, flows along the lines of least resistance. Production and industry have gravitated to the areas and along the routes of lowest costs. The industrial and agricultural development that has occurred along the inland waterway system of interior America has benefited this Nation beyond measure.

On behalf of the Board of Directors and members of DINAMO, I wish to express to you Mr. Chairman and you Mr. Bevill, our heartfelt best wishes to you both at the end of this current session of Congress. Thank you for your leadership, your energy, your cooperation, and your humanity.

TUESDAY, FEBRUARY 27, 1996.

TENNESSEE RIVER VALLEY AUTHORITY AND CORPS OF ENGINEERS PROJECTS

WITNESS

JANICE L. JONES, EXECUTIVE DIRECTOR, TENNESSEE RIVER VALLEY ASSOCIATION

Mr. MYERS. Next is Janice Jones, Executive Director of the Tennessee River Valley Association. Your prepared statement will be placed in the record and you may proceed as you like.

Ms. JONES. Thank you. Mr. Chairman and Mr. Chairman, Congressman Frelinghuysen. Thank you for allowing us again to have the opportunity to appear here before you today. For the record, my name is Jan Jones. I am Executive Director of the Tennessee River Valley Association, a regional nonpartisan economic development association.

Sitting beside me today is TRVA's President, Dennis Prince, who operates the Tennessee Southern Railroad Company. Mr. Chairman, TRVA members appreciate your wisdom in funding projects that have served to improve not only the Nation's economy, but also the quality of life for people throughout the United States.

We especially appreciate the leadership of Chairman Myers and Chairman Bevill. Your names are synonymous with the word, "progress". It goes without saying, we will miss you and truly yours if not an impossible task, will be a hard act to follow. This is a day that we were hoping we wouldn't see. But time marches on.

Mr. MYERS. There are some bright young ones coming on here.

Ms. JONES. Looks like we have some excellent leadership moving forward, and we welcome you to the committee and look forward to working with you in the future.

Mr. Chairman, we understand the problems of dwindling budgets and limited resources and the need to make every dollar. For that reason I have been asked to speak on behalf of the TVA. Since its founding, this innovative development agency has improved the lives of millions across the country.

With TVA assistance sharecroppers have become landowners. Angry, swollen rivers have been harnessed to do a job, and dam has become a word that means jobs, energy, transportation, and safety. People from throughout the United States and the world come to the Tennessee Valley to observe, to learn, to experience and adopt the innovative TVA programs developed with the monies that you have appropriated. No matter where you live in the United States, TVA has served as a teacher and a role model.

We humbly ask that you restore TVA's funding to approximately the $130 million level. Thanks to funding in TVA's appropriated budget last year made by this committee, TVA has made great progress in correcting a very dangerous situation below Pickwick Lock. That project will be completed this summer and we appreciate the dedication of this committee in seeing that funding was appropriated to conduct this project. However, there now exists a real threat of shutting down the entire upper Tennessee River. Chickamauga Lock, which was completed in 1937, is experiencing a severe structural deterioration caused by concrete growth. Analyses show that the lock can only be kept open until the year 2005.

The final Environmental Impact Study will be completed in March of this year. This study focuses on two options: One, permanent closure of the lock in 2005, or construction of a new 110-by-600-foot lock which would be ready by the time that we would have to close the old lock. To close this lock would abandon 290 miles of the Nation's interconnected inner waterway system and cut off the transportation benefits to not only the upper Tennessee area, but the Nation as a whole.

Mr. Chairman, we also want to express support for the Kentucky Lock Project. We feel this project is also vital. So there are two projects that affect the Tennessee River that have national significance.

Mr. Chairman, we again appreciate the opportunity to appear here before you today. We appreciate the work of this excellent committee. We ask that you give consideration to these requests. Thank you very much.

Mr. MYERS. Thank you for your fine testimony. Nice to have you back, Jan.

Mr. BEVILL. Thank you very much, Janice.

[The statement of Ms. Jones follows:]

TENNESSEE RIVER VALLEY ASSOCIATION

ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE
COMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
FEBRUARY 27, 1996

TESTIMONY SUMMARY

Mr. Chairman, Members of the Committee, thank you for allowing me to appear here today. I am Jan Jones, Executive Director of the Tennessee River Valley Association, a regional, non-partisan economic development association. Appearing with me is TRVA's President, Dennis Prince, who operates the Tennessee Southern Railroad Company.

TRVA members appreciate your wisdom in funding projects that have served to improve not only the nation's economy, but also the quality of life for people throughout the United States. We especially appreciate the leadership of Congressmen Tom Bevill and John Myers whose names are synonymous with progress. We will miss you. Truly, sirs, yours will be a hard act to follow.

We understand the problems of dwindling budgets and limited resources and the need to make every dollar count. For that reason, TRVA members have asked me to speak on behalf of the TVA and its FY97 budget. Since its founding, this innovative development agency has improved the lives of millions across the country. With TVA assistance, sharecroppers have become farm owners. Angry, swollen rivers have been harnessed to do a job. Dam has become a word that means jobs, energy, transportation and safety People from throughout the United States and the world come to the Tennessee Valley to observe, learn, experience and adopt the innovative TVA programs developed with monies you have appropriated. No matter where you live in the United States, TVA has served as a teacher and role model. We urge you to restore the Tennessee Valley Authority's funding to $130-140 million.

Thanks to funding appropriated last year, TVA has made great progress in correcting a very dangerous situation below Pickwick Lock and will complete the channel improvement project this summer. However, there now exists the real threat of shutting down the Upper Tennessee River. Chickamauga Lock, completed in 1937, is experiencing severe structural deterioration caused by concrete growth. Analysis shows that repairs can only keep the lock operational until 2005. The FEIS, to be completed 3/96, focuses on two options: (1) permanent closure of the lock in 2005 and (2) construction of a new lock prior to closing the existing lock. The preferred choice is to construct a new 110 x 600' lock before we have to close the existing lock. Cost of a new lock would be $211 million ('96 dollars) with an almost 5 to 1 B/C ration. Closure of the lock would effectively abandon 290 miles of the nation's interconnected inland waterway system and cut off water transportation benefits to the upper Tennessee River area Permanent closure would have negative economic consequences for the region and Nation. Mr Chairman, we earnestly encourage this Committee's support of continued funding for the Chickamauga Lock Project in TVA's FY97 budget.

Mr. Chairman, Kentucky Lock provides a gateway from the Northeast to the Southeast, Gulf of Mexico and World. It also serves as an alternate route to the lower Mississippi through the Tenn-Tom Waterway to the Gulf. This is economically important as well as beneficial to national defense. Kentucky's 600' chamber is too small to handle a modern 15-barge tow without two lockages. This greatly increases the processing time, further compounds the problem of congestion and gives Kentucky Lock one of the highest transit times in the inland waterways. In 1992 the Corps produced a feasibility report which recommended the addition of a new 110 x 1200' lock. This report is awaiting the recommendation to Congress for authorization. The current cost estimate is $395 million ('95 dollars) with a B/C ratio of 2.4 to 1. We support continuation of funding for the Kentucky Lock Project in the U.S. Corps of Engineers FY96 budget.

In building the interconnected inland waterway system, the federal government has created an invaluable economic development asset that has paid for itself many times over. The national economy has grown because of it and depends heavily on it to continue to develop. We need to recognize that the costs of maintaining and improving the waterway system, while expensive, are true investments in the future of the economy of this country.

Mr. Chairman, we appreciate the excellent work of this important Committee. It is an honor to have the opportunity to appear before you today and we respectfully urge that the Committee give thoughful consideration to our requests. Thank you.

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TENNESSEE RIVER VALLEY ASSOCIATION

ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE
COMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
FEBRUARY 27, 1996

TESTIMONY

Mr. Chairman, Members of the Committee, thank you for allowing me the opportunity to appear here today. I am Jan Jones, Executive Director of the Tennessee River Valley Association. Our organization - TRVA - is a regional, non-partisan economic development association representing the citizens of the seven states which make up the Tennessee Valley. Appearing with me today is TRVA's President, Dennis Prince. Mr. Prince operates the Tennessee Southern Railroad Company, a shortline railroad running from Columbia, Tennessee to Florence, Alabama.

I could not begin talking about energy and water development and the appropriations that make these possible without a word of special thanks to all of you who serve on this committee. TRVA members appreciate your wisdom in funding projects that have served to improve not only the nation's economy, but also the quality of life for people throughout the United States. We especially appreciate the leadership of Congressman Tom Bevill and Congressman John Myers whose names are synonymous with progress. Congressman Bevill, Congressman Myers, we will miss you. Truly, sirs, yours will be a hard act to follow.

Mr. Chairman, children of the Depression as well as "baby boomers" understand the problems of dwindling budgets and limited resources and the need to make every dollar count. Like you, we realize the need to support those projects that provide the most benefit to the most people. For that reason, the Tennessee River Valley Association's membership has asked me to speak to you today in support of programs that have worked, are working and must continue to work.

In short, TRVA members have instructed me to speak to you on behalf of the Tennessee Valley Authority and its FY97 budget. Since its founding more than 60 years ago, this innovative development agency has improved the lives of millions across the country. With TVA assistance, sharecroppers have become farm owners. Angry, swollen rivers have been harnessed to do a job. Dam has become a word that means jobs, energy, transportation and safety. People from throughout the United States and the world come to the Tennessee Valley to observe, to learn, to experience and to adopt the innovative TVA programs developed with monies you have appropriated.

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We have mentioned dams and rivers because they represent an important part of what TVA is all about. But, building dams, controlling rivers and maintaining lands where people live and work are only part of the story. No matter where you live in these United States, TVA has served as a teacher and role model in such areas as:

- energy generation and conservation
- pollution control
- clean water
- environmental waste
- waste management
- agricultural technology
- economic development
- stewardship of our natural resources

TVA is a vital part of our past, our present, our future. For this reason, the Tennessee River Valley Association members urge you to restore the Tennessee Valley Authority's funding to $130-140 million. Those of us who live and work in the Valley can testify that TVA funding nets $1 worth of value for every $1 invested. We ask you to continue your support for these programs that are our very lifeblood.

Thanks to funding appropriated last year, TVA has made great progress in correcting a very dangerous situation below Pickwick Lock and will complete the channel improvement project this summer.

*** CHICKAMAUGA LOCK PROJECT**

There now exists the real threat of shutting down the Upper Tennessee River. The Tennessee Valley Authority (TVA) is nearing completion of its Final Environmental Impact Statement (FEIS) of options to resolve navigation problems at Chickamauga Lock. The lock is located on the Tennessee River just upstream from Chattanooga. Completed in 1937, the aging lock has experienced severe structural deterioration caused by the expansion of the concrete used to build it. Engineering analysis shows that constant repairs can only keep the lock operational until 2005. In addition, the lock is small (60 by 360 feet) and can only accommodate one barge at a time whereas modern locks downstream can accommodate up to nine barges per lockage.

The FEIS, which will be completed by March 1996, focuses on two options: (1) permanent closure of the lock in 2005 and (2) construction of a new lock prior to closing the existing lock. We are now faced with an either/or situation.

The preferred alternative is to construct a new 110 by 600 foot lock before it is necessary to close the existing lock. Upon approval of a decision by the TVA Board of Directors, design of the new lock could begin in late FY96 and construction completed by 2005. The cost of a new lock would be $211 million (1996 dollars), with an approximate 5 to 1 B/C ratio. About $4 million will be needed in FY97.

Permanent closure of the lock, which would involve removing the lock gates, placing a concrete plug in the lock chamber and reinforcing the walls, would cost approximately $6.8 million. There would be no cost-benefit to a permanent closure, only what savings that would be gained by loss of normal operating cost which would be negligible. Closure of the lock would effectively abandon 290 miles of the nation's interconnected inland waterway system and cut off water transportation benefits to all of the upper Tennessee area. It would also curtail all recreational traffic movement between Chickamauga and points upstream. Permanent closure would have devastating economic consequences.

Mr. Chairman, this country is dependent on our inland waterway system for the continued movement of commerce. The loss or failure of any portion of that waterway network affects the immediate area in which it's located but also affects at least the 2/3 of the country which utilize our inland waterways office.

The industries, which employs thousands, located upstream from Chickamauga, are affiliated with, receive goods from or ship products to other business and industries nationally and internationally. These industries depend on low cost, fuel efficient water transportation. Moving materials by barge limits truck traffic, which in turn reduces air pollution, vehicular accidents, highway maintenance, and the number of tires going to landfills. In addition to commercial traffic, recreational traffic through locks on the inland waterways adds substantially to each area's economy.

Mr. Chairman, we earnestly encourage this Committee's support of continued funding for the Chickamauga Lock Project in TVA's FY97 budget.

- **KENTUCKY LOCK ADDITION PROJECT**

Situated near the mouth of the Tennessee River, Kentucky Lock provides the gateway from the Northeast to the Southeast, Gulf of Mexico and the World. Kentucky Lock also acts as the door to a backup system for the inland waterway. In times of drought, as in 1988, an alternate route to the lower Mississippi is available through Kentucky Lock to the Tennessee-Tombigbee Waterway and the Gulf of Mexico. This is economically important as well as beneficial to national defense.

Most barge traffic uses Kentucky Lock instead of nearby Barkley Lock because the lower Tennessee River below Kentucky Lock is $0.50/ton cheaper than the narrow, sinuous, 50% one-way traffic lower Cumberland River below Barkley Lock. The Kentucky Lock/Tennessee River route is cheaper, faster and much safer to navigate which causes congestion and delay at Kentucky Lock.

In addition, Kentucky's 600' chamber is too small to handle a modern 15-barge tow without two lockages. This greatly increases the processing time, further compounds the problem of congestion, and gives Kentucky Lock one of the highest transit times in the inland waterways. Transit times through either Kentucky or Barkley Locks are significantly increased when either lock is closed for maintenance.

Major maintenance at the existing Kentucky Lock will require the lock be closed for a 130 days in 2009 and 130 days in 2010. During the two closure periods, delays at Barkley could exceed 150 hours. Without the new Kentucky Lock in place, by the year 2009 and 2010 down time will cost industry up to $250,000,000.

In 1992 the Nashville District produced a feasibility report titled "Lower Cumberland and Tennessee Rivers - Final Feasibility Study - Kentucky Lock Addition," which recommended the addition of a new 110 foot by 1200 foot lock estimated to cost $448 million at October 1991 prices ($492 million at October 1995 prices).

The Feasibility Report is at the Assistant Secretary of the Army for Civil Work's office awaiting their recommendation to congress for authorization. The next step is authorization in the Water Resources Development Act. Congress appropriated $500,000 in FY93 for continued design and engineering. These funds were expended for reanalysis of the project formulation. The FY94, FY95 and FY96 Appropriations Acts directed that $2,000,000 for each of those years be expended for design activities, hydraulic modeling and geotechnical explorations. In 1995 the Nashville District completed Innovative Design/Cost Reductions studies which reduced the total construction cost by $97,100,000. The current cost estimate is $395.0 million (October 1995) and $530 million Fully Funded with a current B/C ratio of 2.4 to 1.

We support a continuation of funding for the Kentucky Lock Project in the U.S. Army Corps of Engineers FY96 budget.

In building the interconnected inland waterway system, the federal government has created an invaluable economic development asset that has paid for itself many times over. The national economy has grown because of it and depends heavily on it to continue to develop. We need to recognize that the costs of maintaining and improving the waterway system, while expensive, are true investments in the future of the economy of this country.

Mr. Chairman, we appreciate the excellent work of this important Committee. It is an honor to have the opportunity to appear before you today and we respectfully urge that the Committee give thoughtful consideration to our requests. Thank you.

TENNESSEE RIVER VALLEY ASSOCIATION

FACT SHEET

CHICKAMAUGA LOCK:
THE PROBLEM, THE OPPORTUNITIES

contact:
Jan Jones (205) 355-4660

the situation	The Tennessee Valley Authority (TVA) is nearing completion of its Final Environmental Impact Statement (FEIS) of options to resolve navigation problems at Chickamauga Lock. The lock is located on the Tennessee River just upstream from Chattanooga. Completed in 1937, the aging lock has experienced severe structural deterioration caused by concrete growth. Constant repairs are required to keep the lock in operation. Engineering analysis shows that repairs can only keep the lock operational until 2005. In addition, the lock is small (60 by 360 feet) and can only accommodate one barge at a time whereas modern locks downstream can accommodate up to nine barges per lockage.
what are the options?	The FEIS focuses on two options: (1) permanent closure of the lock in 2005 and (2) construction of a new lock prior to closing the existing lock.
what is being done?	TVA plans to complete the FEIS by March 1996. The preferred alternative is to construct a new 110 by 600 foot lock prior to closing the existing lock. Upon approval of the record of decision of the TVA Board of Directors, design of the new lock could begin in late fiscal year 1996.
what would it cost and who pays for it?	The cost of a new lock would be $211 million (1996 dollars). The project would take 10 years to design and construct. Funding would be by Federal appropriations.
what is the value of the lock?	Industries located upstream from Chickamauga Lock depend on low cost, fuel efficient water transportation for the transport of raw materials. A reliable waterway makes these plants competitive with other plants in the Nation as well as attracting new industry to the region. Moving materials by barge limits truck traffic which in turn reduces air pollution, vehicular accidents, highway maintenance, and the number of tires going to landfills. In addition, recreational traffic through the lock adds substantially to the region's economy every year with special events like the River Bend Festival, Fall Color Cruise and VOL Navy.
where can I get more information?	If you or your organization would like more information, and/or speakers regarding Chickamauga Lock, contact TRVA at (205) 355-4660.

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TENNESSEE RIVER VALLEY ASSOCIATION

TVA'S ENVIRONMENTAL RESEARCH CENTER

TVA's Clean Water Initiative is doing innovative and economical activities to prevent pollution in the region's lakes, river, and steams. The idea is to protect the water quality so that present and future generations can enjoy the economic and recreational benefits of clean water. TVA has set up River Action Teams (RATS) in several watersheds in the region to help protect the quality of the water. TVA's RATS are building partnerships with local people and those that work with them from other State and Federal agencies. Together, they're trying to get the most environmental benefit from each dollar spent in their areas.

The RAT's efforts are paying off. Last year, 22,500 volunteer hours were logged in monitoring and clearing up lakes, rivers, and streams. RATs helped start over 40 local coalitions to tackle water quality problems, stabilized 9,300 feet of shoreline, and implemented 43 best management practices such as building constructed wetlands, fencing, and steambank revegetation. The partnerships are paying off. Water quality is being improved and the TVA RATS are accomplishing more with the funding they get from Congress.

TVA's RAT team in the Chickamauga-Nickajack area is working with a nonprofit citizens group to reduce acid-mine drainage by installing treatment systems. They're also stabilizing streambanks to help prevent nonpoint source pollution and sedimentation of the lakes. The partners are also working with schools and communities in the watershed to enlist their help in preventing and solving environmental problems.

TVA's work is new, innovative, and is being recommended for use in other regions. The EPA, USDA, and other agencies have noticed TVA's work and have become partners in the region. This makes all their work more effective and prevents duplication.

In addition, the national organization, Water Quality 2000, has evaluated TVA's work in its Clean Water Initiative. The group is a coalition of over 70 different national organizations representing public and private entities across the nation. Their evaluation concluded that TVA's Clean Water Initiative should be expanded, promoted, and replicated in other watersheds.

It is this kind of national attention that shows how effective TVA is using the funding your committee provides. What TVA is doing in the region to protect the quality of water in the regions lakes, rivers, and streams can be used all across the country.

So it is with TVA's Environmental Research Center at Muscle Shoals, Alabama. It is a fact that TVA operates the nation's most effective public research laboratory for inventing new ways to solve agricultural, minicipal, and industrial pollution problems. It is truly a national organization and the research that they conduct there is returning excellent benefits. Throughout its history, TVA has been heavily involved in helping keep agriculture sustainable, competitive, and internationally prominent. Its past work in agricultural research helped make U.S. agriculture the envy of the world.

Today, the Environmental Research Center is discovering new and lower cost ways to reduce pollution of air, land, and water. If our region and nation are to keep the economy growing, we must have new technologies to operate our farms, factories, and cities in environmentally responsible ways. The research that your funding provides, is already making progress in helping the nation avoid a crisis in managing agricultural, municipal, and industrial wastes.

The leaders of the Environmental Research Center are looking for ways to increase their funding from private businesses and other agencies. And they have some excellent technologies and technical assistance to provide in cleaning up contaminated sites. The Center should be encouraged to speed up efforts to get additional funding to find the new ways of solving pollution problems that our nation so sorely needs.

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There is one area of research that TVA is leading the nation on. It is responding to the national concern about low-level ozone problems in many highly populated regions of the country. Most of us think about how important the ozone layer is in the upper atmosphere. It protects us from the very harmful rays of the sun. The low-level ozone is a bad factor and I call it the bad ozone. It hovers in our major cities and in some rural areas and is causing a lot of medical problems such as respiratory ailments. It seems to be getting more serious each year.

TVA's Environmental Research Center is leading the Southern Oxidant's Study. This is really a national study cosponsored by TVA, NOAA, EPA, USDA, DOE, leading universities, and several industry groups. They have targeted the Nashville, Tennessee area as a site to monitor low-level ozone and try to determine its sources and find ways to reduce its effect on the population. They are finding that this bad ozone is causing agriculture crop loses and is affecting economic growth. Bad ozone can be one of the reasons that economic expansion is limited in some industrial areas. The air is already so bad that some cities can't approve more expansion

TVA's work in this area is vital to the nation. We must find the exact cause of the formation of this bad ozone and find reasonsable ways to solve the problem

TVA's Environmental Research Center also has a constructed wetlands research facility. The work they're doing there is helping find ways to make constructed wetlands more efficient in cleaning up waste streams from industry and agriculture. EPA, USDA, and leading universities are cooperating in this work and sanction what TVA is doing Constructed wetlands offer a very real and efficient way to treat many of our wastes in the region and nation

The Environmental Research Center is also finding ways to help TVA's RATS prevent and clean up the pollution in lakes, rivers, and streams. They're working with farmers, USDA, EPA, and others to find ways to capture nutrients and pesticides from agricultural runoff from entering lakes, rivers, and streams. They're looking for ways to convert animal wastes into beneficial products ... solving a waste problem and creating some economic value. And the Center is working with DOD and DOE to clean up a variety of military sites around the nation where severe contamination is found

All these examples of their work clearly show the national asset of TVA's Environmental Research Center. Their scientists are making great strides in helping solve agricultural, municipal, and industrial pollution problems. But there's a lot of work yet to be done.

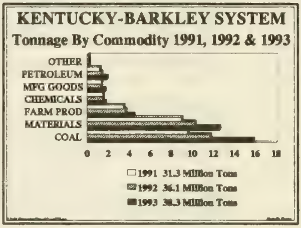
The work TVA is doing to find ways to promote sustainable economic progress is sound and is good for the nation. Although TVA is a regional organization, its work has impact throughout the nation. Let's look upon it as a national asset that is helping find new and more efficient ways to keep our farms, factories, and cities economically sound and environmentally acceptable.

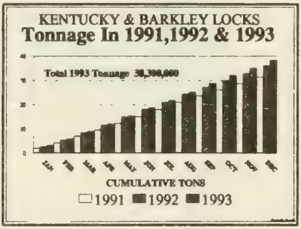
KENTUCKY LOCK ADDITION PROJECT UPDATE

Proposed Project:
Construction of a 110'x1200' new lock chamber adjacent to the existing lock at the Kentucky Project on the Tennessee River. Cost is $395,000,000 in Oct 95 dollars. One-half of the construction funds would come from the Inland Waterways Trust Fund. The project would create about 500 jobs during the peak seven years of construction. The project has a 2.4 to 1 B/C.

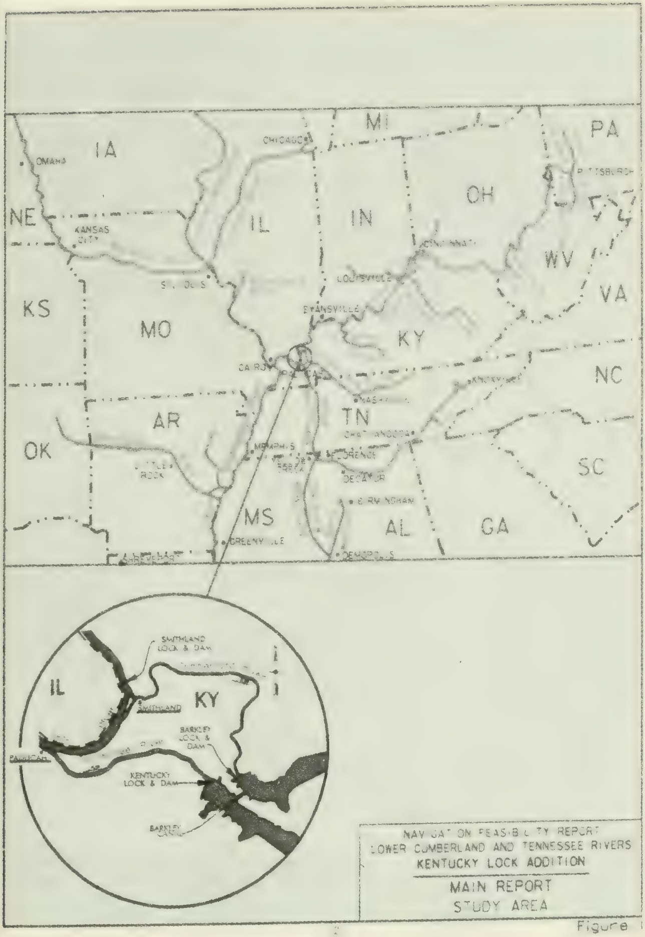
The Problem at Kentucky Lock:
Most barge traffic uses Kentucky Lock instead of nearby Barkley Lock because the lower Tennesse River below Kentucky Lock is $0.50/ton cheaper than the **narrow, sinuous, 50% one-way traffic** lower Cumberland River below Barkley Lock. The Kentucky Lock/Tennessee River route is cheaper, faster and much safer to navigate. This causes congestion and delay at Kentucky Lock.

In addition, Kentucky's 600' chamber is **too small to handle a modern 15-barge tow** without two lockages. This greatly increases the processing time and further compounds the problem of congestion and gives Kentucky Lock one of the highest transit times in the inland waterways. Transit times through either Kentucky or Barkley Locks are significantly increased when either lock is closed for maintenance.





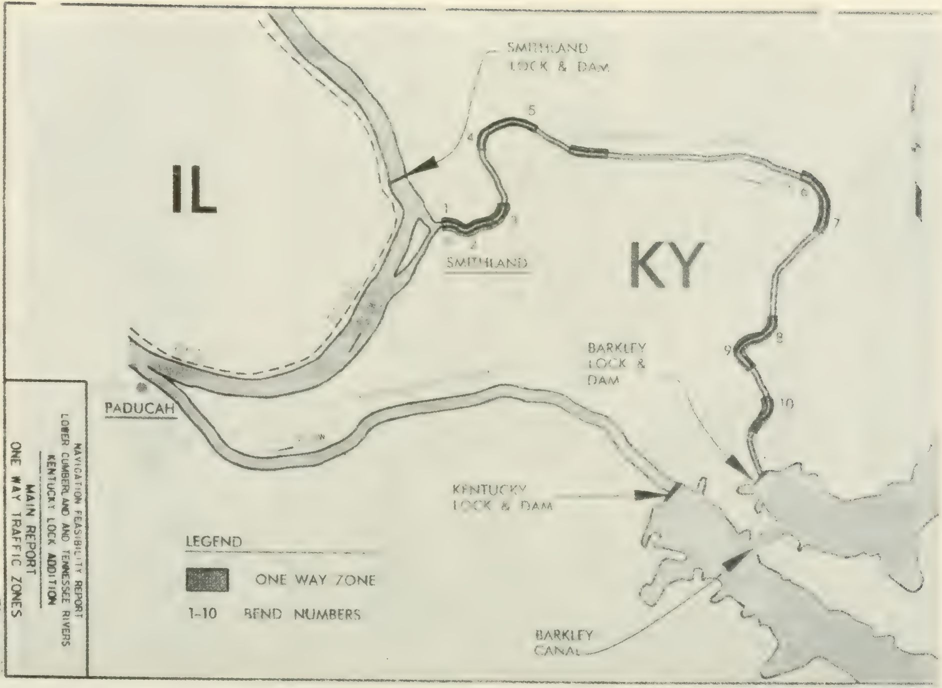
Status:
The Feasibility Report, approved 1 June 1992 by the Chief of Engineers, is at the Assistant Secretary of the Army for Civil Works office awaiting thier recommendation to Congress for authorization. **The next step is authorization in the 1996 Water Resources Development Act.** Congress appropriated $500,000 in FY 1993 for continued design and engineering. These funds were expended for reanalysis of the project formulation. The FY94, FY95, and FY96 Appropriations Acts directed that $2,000,000 for each of those years be expended for design activities, hydraulic modeling and geotechnical explorations. **In 1995 the Nashville District completed Innovative Design/Cost Reductions studies which reduced the total construction cost by $97,000,000.**



NAVIGATION FEASIBILITY REPORT
LOWER CUMBERLAND AND TENNESSEE RIVERS
KENTUCKY LOCK ADDITION

MAIN REPORT
STUDY AREA

Figure 1



NAVIGATION FEASIBILITY REPORT
LOWER CUMBERLAND AND TENNESSEE RIVERS
KENTUCKY LOCK ADDITION

MAIN REPORT
ONE WAY TRAFFIC ZONES

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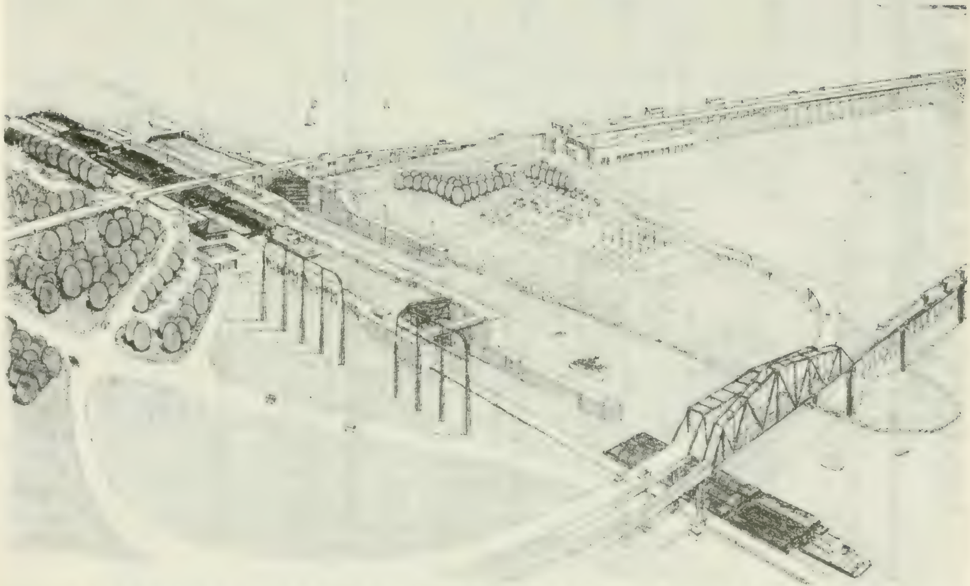

PROPOSED DOCK ADDITION • KENTUCKY RESERVATION

KENTUCKY LOCK ADDITION
PROJECT UPDATE

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KENTUCKY LOCK ADDITION
PROJECT UPDATE

SEQUENCE OF EVENTS

Authority for the Feasibility Report:

October 2, 1972 resolution by the Senate Committee on Public Works and September 9, 1982 resolution by Senate Committee on the Environment and Public Works.

Dates of Corps Reports:

January 1992	Division Engineer's Report/Public Notice:
March 1992	Board of Engineers for Rivers & Harbors
May 1992	Proposed Chief of Engineers' Rept to States and Agencies
June 1992	Chief of Engineers's Report
May 1994	Draft Limited Reevaluation Report to Headquarters
June 1995	Innovative Design/ Cost Reduction Report

The Kentucky Lock Addition Project is currently in the PED*Phase.

*(Pre-Construction Engineering & Design)

PED funds were added by Congress:

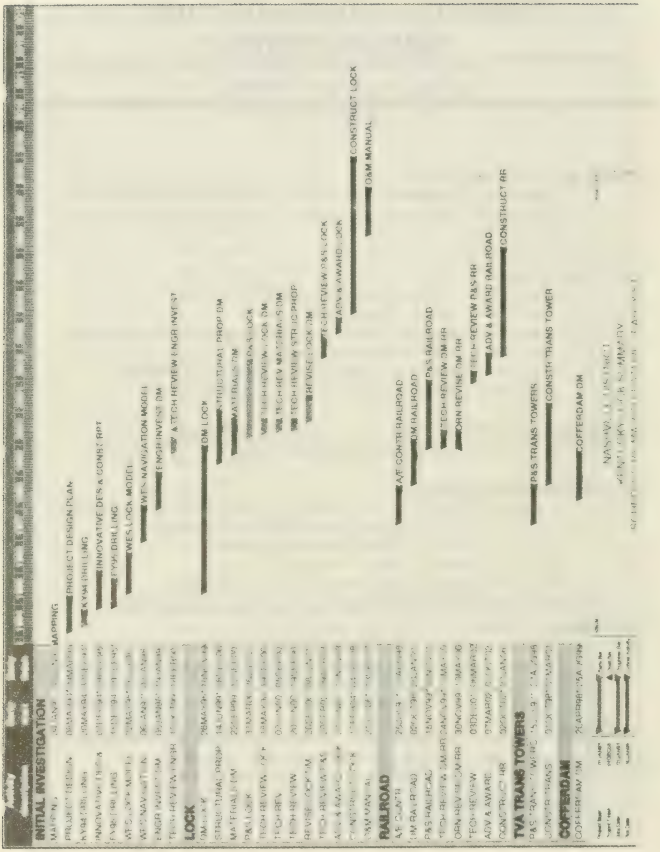
FY 92	$ 500,000	(Not allocated to the District because Final Feasibility approval did not occur until June 1992
FY 93	$ 500,000	Limited Reevaluation Report
FY 94	$ 2,000,000	Initial Exploration & Design
FY 95	$ 2,000,000	Cost Reduction & Innovative Design
FY 96	$ 2,000,000	WES Studies & Lock Design Memorandum

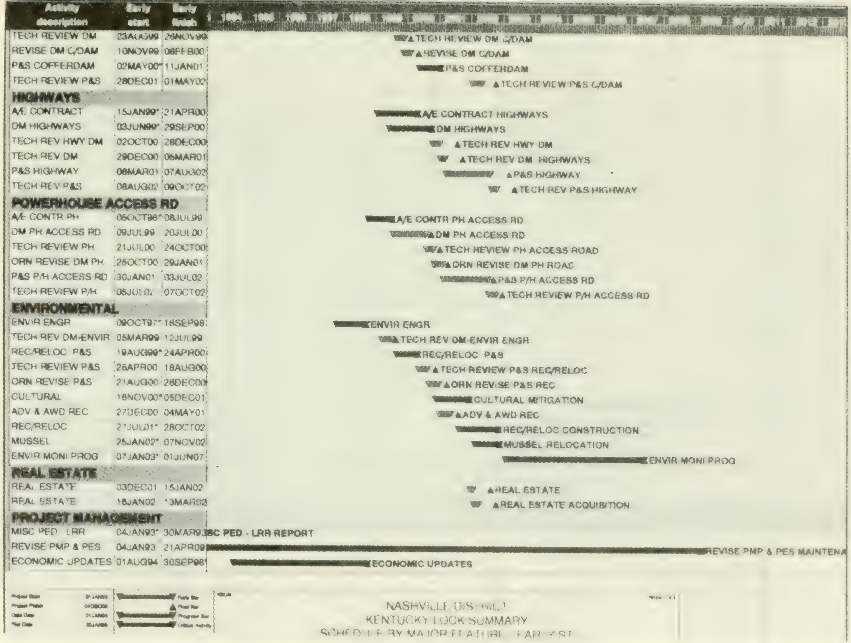
Future Sequence of Events:

FY 97 - FY 98 Continue engineering & design, complete WES navigation and lock physical models, do plans & specs for relocation of TVA transmission towers in preparation for a construction contract in October 1998.

The following schedules are included:

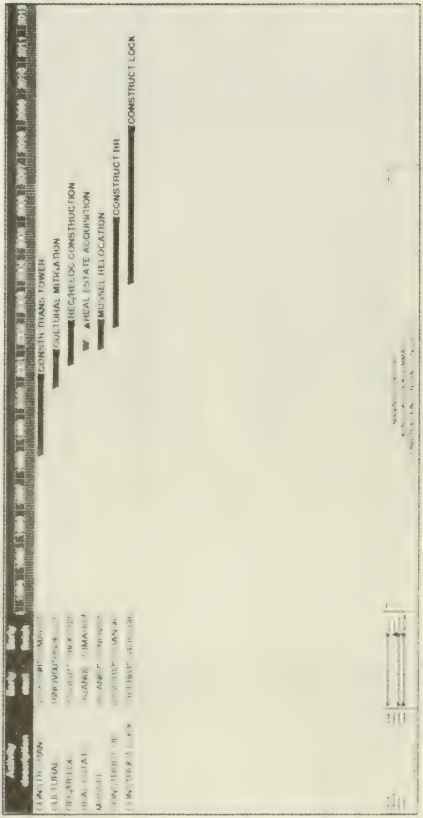
Grouped Early Start Schedule by Major Feature
Construction Contracts Schedule


INITIAL INVESTIGATION
MAPPING
PROJECT DESIGN PLAN
KY94 DRILLING
INNOVATIVE DES & CONST RPT
FY95 DRILLING
WES LOCK MODEL
WES NAVIGATION MODEL
ENGR INVEST DM
TECH REVIEW ENGR INVEST
LOCK
DM LOCK
STRUCTURAL PROP DM
MATERIALS DM
P&S LOCK
TECH REVIEW LOCK DM
TECH REV MATERIALS DM
TECH REVIEW STRUC PROP
REVISE LOCK DM
TECH REVIEW P&S LOCK
ADV & AWARD LOCK
CONSTRUCT LOCK
O&M MANUAL
RAILROAD
A/E CONTR RAILROAD
DM RAILROAD
P&S RAILROAD
TECH REVIEW DM RR
ORN REVISE DM RR
TECH REVIEW P&S RR
ADV & AWARD RAILROAD
CONSTRUCT RR
TVA TRANS TOWERS
P&S TRANS TOWERS
CONSTR TRANS TOWER
COFFERDAM
COFFERDAM DM
NASHVILLE DISTRICT
KENTUCKY LOCK SUMMARY



Activity description	Early start	Early finish
TECH REVIEW DM	23AUG99	26NOV99
REVISE DM C/DAM	10NOV99	08FEB00
P&S COFFERDAM	02MAY00*	11JAN01
TECH REVIEW P&S	28DEC01	01MAY02
HIGHWAYS		
A/E CONTRACT	15JAN99*	21APR00
DM HIGHWAYS	03JUN99*	29SEP00
TECH REV HWY DM	02OCT00	28DEC00
TECH REV DM	29DEC00	06MAR01
P&S HIGHWAY	08MAR01	07AUG02
TECH REV P&S	08AUG02	09OCT02
POWERHOUSE ACCESS RD		
A/E CONTR PH	05OCT98*	08JUL99
DM PH ACCESS RD	09JUL99	20JUL00
TECH REVIEW PH	21JUL00	24OCT00
ORN REVISE DM PH	26OCT00	29JAN01
P&S P/H ACCESS RD	30JAN01	03JUL02
TECH REVIEW P/H	05JUL02	07OCT02
ENVIRONMENTAL		
ENVIR ENGR	09OCT97*	18SEP98
TECH REV DM-ENVIR	05MAR99	12JUL99
REC/RELOC P&S	19AUG99*	24APR00
TECH REVIEW P&S	26APR00	18AUG00
ORN REVISE P&S	21AUG00	28DEC00
CULTURAL	18NOV00*	05DEC01
ADV & AWD REC	27DEC00	04MAY01
REC/RELOC	27JUL01*	28OCT02
MUSSEL	25JAN02*	07NOV02
ENVIR MONI PROG	07JAN03*	01JUN07
REAL ESTATE		
REAL ESTATE	03DEC01	15JAN02
REAL ESTATE	16JAN02	13MAR02
PROJECT MANAGEMENT		
MISC PED LRR	04JAN93*	30MAR93
REVISE PMP & PES	04JAN93	21APR09
ECONOMIC UPDATES	01AUG94	30SEP98

NASHVILLE DISTRICT
KENTUCKY LOCK SUMMARY
SCHEDULE BY MAJOR FEATURE EARLY ST


CONSTR TRANS TOWER
CULTURAL MITIGATION
REC/RELOC CONSTRUCTION
REAL ESTATE ACQUISITION
MUSSEL RELOCATION
CONSTRUCT RR
CONSTRUCT LOCK

KENTUCKY LOCK ADDITION
PROJECT UPDATE

FUNDING REQUIREMENTS

PED Costs: **Design Costs prior to First Construction Contract**

REVISED PED (Jan 1994) = $ 11.5 million

FY 93	FY 94	FY 95	FY 96	FY 97	FY 98	**FY 99**
0.5 M	2.0 M	2.0 M	2.0 M	3.0 M	2.0 M	**1st Contrac**

TO EXECUTE THE ABOVE CONSTRUCTION START SCHEDULE, THIS PROJECT MUST BE AUTHORIZED BY 1996

AN APPROVED CONSTRUCTION START IS NEEDED FOR FY 99.
Funding required in first year of construction is $10 million

First Contract is the Relocation of TVA Towers - they are currently in the way of the new Lock Wall.

TAB 2

KENTUCKY LOCK ADDITION
PROJECT UPDATE

PROJECT ECONOMICS

Kentucky Lock will generate $55.1 million in average annual benefits to the nation.

Kentucky Lock will cost an average annual $22.5 million.

Net annual NED benefits are $32.6 million.

The B/C Ratio is 2.4

Project Cost : $395 million (Oct 1995 dollars)
: $530 million Fully Funded

Major Maintenance at Kentucky Lock will require closing the lock FOR 130 days in 2009 and 130 days in 2010. Barkley Lock is scheduled for periodic maintenance in 2010.

Without the new Kentucky Lock in place, the 2009 &2010 down time will cost industry up to $250,000,000.

KENTUCKY LOCK ADDITION
PROJECT UPDATE

KENTUCKY-BARKLEY SYSTEM OF LOCKS

KENTUCKY LOCK is 110' x 600', has a normal lift of 56 feet, and has five hydroelectric units in the adjacent dam. It was placed in operation in 1942. It will pass an **8-barge tow** in one lockage.

BARKLEY LOCK is 110' x 800', has a normal lift of 57 feet, and has four hydroelectric units in the adjacent dam. It was placed in operation in 1964.
It will pass an **11-barge tow** in one lockage.

NAVIGATION CONDITIONS & LOCK OPERATION

EXISTING CONDITIONS (1995):
Barkley hydropower plant is currently operated to benefit navigation on the lower Cumberland River with the following procedures:

* Changes in generation are limited to one hydropower unit (35 mw) per hour to dampen the rate of change in downstream velocities and tailwater levels.

* No upper limit, can generate power by releasing up to 52,000 cfs. Many tows trying to operate on the lower Cumberland cannot navigate with the these flow release generate.

* No helper boats at Kentucky Lock

WITHOUT PROJECT CONDITIONS: To be Implemented 2000 - 2008:

* **Limit upper level discharges at Barkley Lock to 27,000 cfs** during Kentucky Lock closures. And limit upper level to 40,000 cfs during normal operating conditions. **This will cost $15,400,000 in lost hydropower benefits***

* **Institute HELPER BOATS** at Kentucky Lock: 1 boat upstream and 1 boat downstream at a **cost of $2,600,000.***

With the above measures in place, the delay cost would still exceed $23 million per year.

*(Ave. Annual costs, Oct 1993 dollars)

PROJECT UPDATE

KENTUCKY-BARKLEY SYSTEM OF LOCKS

COMPARISON OF THE LOWER TENNESSEE & CUMBERLAND RIVERS

LOWER TENNESSEE RIVER:

- VERY WIDE RIVER
- 22 MILES TO THE OHIO RIVER
- NO BENDWAYS
- NO ONE WAY TRAFFIC ZONES
- NO EFFECTS FROM HYDROPOWER RELEASES ON NAVIGATION

LOWER CUMBERLAND RIVER:

- VERY NARROW AND WINDING RIVER
- 32 MILES TO THE OHIO RIVER
- HAS 10 DIFFICULT BENDWAYS
- 50% OF THE RIVER IS ONLY ONE-WAY TRAFFIC
- COSTS $ 0.50 PER TON MORE TO NAVIGATE
- ADVERSE EFFECTS FROM HYDROPOWER RELEASES
- HIGHER INCIDENCE OF FOG

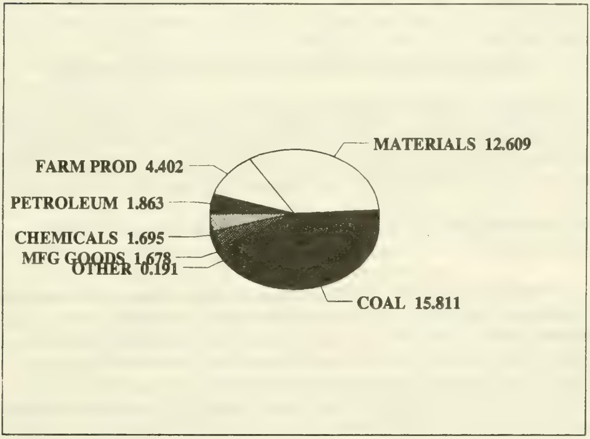
KENTUCKY LOCK ADDITION
PROJECT UPDATE

REGIONAL IMPACT OF KENTUCKY LOCK

* KENTUCKY LOCK is the gateway between the Mississippi, Illinois, Missouri and Ohio Rivers and the Tennessee Valley. (See accompanying map).
* NEARLY HALF of all the traffic thru Kentucky Lock IS COAL.

* OVER 15 MILLION TONS OF COAL FEED to TVA POWER PLANTS

* TWELVE MILLION TONS OF AGGREGATES provide building materials FOR construction in TENNESSEE AND THE SOUTHEAST.



KENTUCKY LOCK COMMODITIES IN 1993 MILLION TONS

KENTUCKY LOCK ADDITION
PROJECT UPDATE

QUESTIONS & ANSWERS

Q1 Why can't the existing 600' lock at Kentucky be extended to 1200'?

A1 It could not be extended upstream because of geological conditions. Just above the existing lock is a deep drop-off in the founding level rocks, making anchoring the lock walls impractical and very expensive.

It could be extended downstream geologically, but the existing lock would have to be taken out of service FOR up to 4 years to extend the lock forcing all traffic over to Barkley Lock. Experience and economic analysis says this would drive much of the traffic off the system to other more expensive modes and force towing companies out of business.

Q2 Why does the railroad have to be relocated and the highway raised?

A2 When the new lock is constructed it will bring the upper pool in under the existing railroad and highway bridges. Because the lift is 56 feet, the new pool would cause the tows to have little or no clearance under the bridges. The railroad must be relocated downstream and the highway raised to alleviate this conflict.

Q3 Why can't you fix the bendways and make more traffic go down the Cumberland River?

Q4 Modifying some or all ten bendways on the lower Cumberland River would reduce delays in the bends, slightly increase the average tow speed, and improve navigational safety. The cost of using the lower Cumberland would still be higher than the lower Tennessee. This approach does nothing to address the lack of capacity during closures and only partially addresses the general lack of system capacity. In addition, the modifications would cause significant impacts to both aquatic and cultural resources. This plan would cost $49.5 million (Oct 91 dollars) and have a negative B/C. The net incremental benefits are $ -2.6 million (Oct 91 dollars).

TUESDAY, FEBRUARY 27, 1996.

UPPER MISSISSIPPI AND ILLINOIS RIVERS

WITNESS

CHRISTOPHER J. BRESCIA, PRESIDENT, MARC 2000

Mr. MYERS. Christopher Brescia, President of MARC 2000.

Mr. BRESCIA. I am Chris Brescia from MARC 2000. It is a pleasure to be here this year. We would like to make a few comments on the fiscal year 1997 Corps of Engineers budget without the benefit of that document we are working from, our experience in the programs that we are engaged in, and what we feel is necessary at that time.

Our first order of priority is the completion and the continuation of the funding of a feasibility study, the Upper Mississippi-Illinois Navigation Feasibility Study, which covers 35 locks and dams over the entire Upper Mississippi region. We also wish to express our support for a major rehabilitation project, which is currently keeping the old locks and dams from eroding any further and modernizing their electrical systems.

We applaud the work that this committee has done over the last 10 years in making sure that that program is maintained and given priority, and of course for the continued operation and maintenance of the system.

If I could take a few minutes to mention that in focusing on the Navigation Feasibility Study, which is the initiative which will lay the groundwork for any future efforts in the entire Upper Mississippi region, we are somewhat chagrined in the sense that the Corps of Engineers was not ever given the opportunity last year to request the type of money that was necessary to comply with the wishes of this committee, which is to keep the study on track, to keep it within a time frame that was acceptable, and to keep the scope of work complete to produce a good product.

We, therefore, are asking this year that the committee look very closely at how to either, one, reprogram some funds this fiscal year to keep us on track, or two, address the needs in the fiscal year 1997 budget. We ask that the 1997 appropriation level reflect the $8.6 million that is necessary to keep it on course with the project management plan and an additional $4.4 million to make up the time and lost work that may not be done this year. We hope that can still be solved, but are not sure.

We also ask this committee to assure that the funds that are made available by this committee and the Congress are allowed to be expended by the Corps of Engineers specifically for the purpose of completing the study. We are about 40 percent done. We have finished the rescoping process, which took us quite a while to reach a consensus on. The actions of this committee helped bring that to resolution. We are at the point of execution. We need the funds to execute so we can complete this and get on with building the needs of the region into the future.

I would also like to reemphasize the need for the major rehabilitation funding and also make a few points about the environmental management program, which is also funded through this subcommittee. We find that this program has provided some qualitative benefits to the region. We are engaged with many others in the region in reassessing the focus and scope for any intentions towards suggesting reauthorization that are currently underway.

What has been the most dramatic change over the last year is that we participated in an environmental summit with the regional leadership at the Federal, State, private, economic and environmental community levels in our region, all agreed to a document, which would push us in a common direction of working collaboratively to prioritize the issues in the region, reach consensus on how to solve some of those problems and, hopefully, in time bring that back to Congress with some direction and a unified voice from the Upper Mississippi region.

Thank you very much. We, too, are going to miss you because we know that you understand that the Upper Mississippi feeds into the Lower Mississippi into other aspects of the inland system. We wish you well, and thank you very much for your support.

Mr. MYERS. Thank you for your statement and your nice words.

[The statement of Mr. Brescia follows:]

Testimony of Christopher J. Brescia
President
Midwest Area River Coalition 2000
Before the
House Appropriations Energy & Water Development Subcommittee
U.S. House of Representatives
Washington, D.C.
February 27, 1996

Mr. Chairman and Distinguished Members of the Subcommittee, I am Christopher Brescia, President of the Midwest Area River Coalition 2000 (MARC 2000), based in St. Louis, Missouri. Thank you for the opportunity to appear before you today to express our views on certain portions of the U.S. Army Corps of Engineers' program for FY 97.

Our testimony today expresses support for sufficient funding for the Upper Mississippi/Illinois River Navigation Feasibility Study to produce a conclusion to this study process according to the guidelines expressed by this Committee and its conferees last year. In addition, we wish to express our support for the continuation of the major rehabilitation program on the Upper Mississippi River and Illinois Waterway and necessary Operation and Maintenance funding to keep this important river system a reliable corridor for the movement of commodities.

Mr. Chairman, MARC 2000's membership tripled in size since we appeared before you last year. The recognition that the future of our inland system is less than guaranteed is becoming ever increasingly commonplace. The political imperative to address the question of equity in federal support for our region is mounting. At least one Presidential candidate directly raised the need to assure modernized river infrastructure during the Iowa caucus. Every attempt will be made during this election year to make candidates aware of the economic, social and political significance of waterways infrastructure to the well-being of the state's that border the river system and to the nation.

Upper Mississippi/Illinois River Navigation Feasibility Study

This multi-year navigation feasibility study is reviewing the future role the waterways can play in continuing to fuel economic expansion in the region. As in past years, we strongly support this effort and continue to hold this feasibility study as a top priority for the region's economic future.

This part of the waterway system operates through a series of locks and dams, many grouped in series, that are old and need to be modernized, especially at certain critical bottlenecks. Corps of Engineers (COE) traffic projections place critical portions of this system at full capacity by the year 2000, resulting in significant delays that could translate into costs as high as $210 million per year and traffic movement off the river system for certain commodities. Other traffic simply may not move by any alternative mode under certain projected economic conditions.

Last year we testified to this concern, but we never thought the reality of our words would be upon us this soon. The powerful influence that the waterway creates in providing regional competitiveness partially evaporated. The result--higher prices paid by grain producers. Iowa Corn Growers alone estimate they paid over $250 million more in transportation costs last year because of the combined inability of outdated locks to process cargoes efficiently, limiting barge capacity even further and rising rail rates. Essentially $250 million shifted away from the rural communities resulting in reduced investment opportunities in the region, reduced secondary and tertiary employment and economic activity.

Record crop production in 1994 and excellent production in 1995 coupled with increased worldwide demand helped many farmers in our nation regain a firm footing with improved grain prices. Major grain exports coupled with industrial product demand re-engaged the transportation sector, but also overwhelmed it. In 1995 it is estimated that over 90 million tons of product moved through portions of the Upper Mississippi River lock and dam system, one the highest in recent history.

If we had a modernized system, perhaps the 10s of millions of tons of grain in our region that today remain on the ground might also have found a home in the export market. A modernized system would allow for more efficient use of existing equipment as the barge industry begins to recover from 12-15 years of assimilation and pushes the shipyards to bring new capacity on line.

Just maintaining the status quo is unacceptable. If we are to sustain the estimated 400,000 full or part-time jobs affected by the commercial use of the Upper Mississippi and Illinois Rivers, that navigation system must be modernized! These jobs generate almost $4 billion in individual income and produce anywhere from a minimum of $11 billion to an estimated $14 billion in revenue for our economy annually. Personal income tax receipts of almost $600 million pays for a wide assortment of services at both the federal and local level. Make no mistake that our intention is to grow this jobs base.

The main reason we are here today can summed up in one anecdotal experience relayed by one of our key agricultural stakeholders in the region. This past year a delegation from South Korea visited our midwest region, the source of their grain purchases. During the visit the Korean delegation specifically asked the U.S. farmers who sold them corn and soybeans whether they would continue to be a "reliable" source of supply in the years to come. It was the South Korean's understanding that the infrastructure on the river was aged and in dire need of modernization. Could this supplier continue to provide grain at competitive prices many years into the future?

At that time, they felt confident in assuring their customers that they could meet long-term commitments. This Congress had already approved a budget for the Corps of Engineers that provided what we thought were necessary funds to keep the Upper Mississippi Navigation Study on track. Specific report language accompanied the appropriation directing the Corps of follow the project management plan, no more and appropriation directing the Corps of follow the project management plan, no more and send a report to Washington by Dec. 1999.

Following that action, and the President's signature of one of the few Appropriations bills, we discovered that the Corps of Engineers had in fact not requested the full amount necessary to meet their obligations. They were not allowed to do so. And, in the final analysis, through a higher level of execution, the lack of carryover funding and a much larger savings and slippage imposed by Congress, the navigation feasibility study that had largely stayed on track is now facing a **minimum of 12 months delay if not more.** In FY 96, in order to meet the request of this committee, this study required $9 million in funding. The study team has only been authorized to spend $4.6 million out of the $6.2 appropriated.

According to the reconnaissance study, this 12 month delay will cost the nation's economy anywhere from $150-200 million dollars in increased transportation costs. Those increased transportation costs from our region of the nation will likely principally be borne by producers of the commodities exported to the global market. Our competitiveness will decline. The wealth that could have been distributed through the region and nation's rural communities will be transferred elsewhere.

For these reasons, Mr. Chairman and Members of the Committee, we ask that the FY 97 appropriations level reflect the $8.6 million necessary to continue on course according to the project management plan, plus an additional $4.4 million to allow the Corps to recover the lost time and perform the work that will not be done this year. **We ask for a total study appropriations of $13 million or, absent the President's specified levels, that amount which the Corps has the capability to execute.**

A six-year study is already hard to swallow, given existing economic pressures, but a seven, eight or more study will sap the energy from our region's hopes to capitalize on rising global demand.

Other Funding Requests

We are grateful that the Congress, especially this Committee, and the Corps of Engineers have anticipated the needs of our waterway system so that our nation may share in some fashion in emerging market opportunities. The Corps' Major Rehabilitation funding requests are part of scheduled improvements currently underway and proposed for the next few years, to provide major rehabilitation to a series of locks and dams, many that are more than 50 years old. **We strongly urge this Committee to give these funding requests high priority.**

We also urge the Committee to carefully evaluate the operations and maintenance requests from the three Corps Districts and two Divisions responsible for keeping the Mississippi and Illinois Rivers navigable. Record movements on the waterways system will place continued pressure on the budget to keep up. The four-lock closure on the Illinois River (Lockport, Marsailles, Brandon Road, Dresden Island) this past year was well executed, coordinated well with industry and allowed for the least amount of disruption as possible.

EMP Enhancement

As an organization, we have as our primary objective the need to address the capacity concerns of the river system as they affect the future reliability of economic activity from the region. At the same time, we also understand that this agenda must take into consideration environmental impacts.

We urge continued funding of the Upper Mississippi River System Environmental Management Program (EMP). This program has brought together traditionally competing interests into partnership for a better understanding of our river system. The long-term resource monitoring component has provide the Navigation Feasibility study with new information on which to base future decision. The habitat projects have certainly provided some qualitative benefit to the region. We join other groups in expressing our hope that funding for this program will continue in FY 97.

We are also hopeful that the current review of the program, in anticipation of a report to Congress, is comprehensive and thoughtfully assesses a priority focus for any future consideration for re-authorization.

In that respect, MARC 2000 was pleased to participate in a regional "Summit," hosted by the Corps of Engineers, that brought together the leadership from the federal agencies, state governments, and private sector economic and environmental groups. We left that summit with a commitment to work collaboratively towards a common vision for the future of our river system. MARC 2000, along with American Rivers, has agreed to coordinate this activity in the region. One of the key actions we expect to come out of this effort is a stronger working relationship to address those areas of priority. Last year we indicated our continued support for an environmentally-sustainable agenda for our region. We expect to be moving in this direction as we support a growing navigation system.

Thank you for the opportunity to present our views.

TUESDAY, FEBRUARY 27, 1996.

CORPS OF ENGINEERS, BUREAU OF RECLAMATION, TVA, FERC

WITNESS

R. MAX PETERSON, EXECUTIVE VICE PRESIDENT, INTERNATIONAL ASSOCIATION OF FISH AND WILDLIFE AGENCIES

Mr. MYERS. Next is R. Max Peterson, Executive Vice President of the International Association of Fish and Wildlife Agencies. Your prepared statement will be in the record. You may proceed.

Mr. PETERSON. Thank you. I was surprised to hear that both of you are retiring and that such young people are bailing out. There is life after retirement, as I can vouch for.

We would like to express thanks to both of you for your long and constructive service on behalf of natural resources. I can remember several things that this committee got under way, including mitigation of Tombigbee that Chairman Bevill helped on. You helped on Richard Russell and others. We encourage whoever replaces you on this committee to continue that good work because the plans for such projects have included fish and wildlife benefits and cost as part of project costs and frequently projects are being completed without completing the fish and wildlife aspects of it, which you have gone a long ways to be sure that doesn't happen. We appreciate that.

We would like to see Congress explore the need for generic legislation to the Corps to ensure that older projects include the authority for fish and wildlife mitigation and enhancement. Recognizing that we don't have the budget of either the corps or Tennessee Valley Authority, the Bureau of Reclamation or the FERC, we would like to submit a supplemental statement at such time as that is available.

I won't try to read through the entire testimony, but to point out that we are in favor of certain things going on, including trying to streamline the process for review and issuance of permits on the Clean Water Act, to provide for an appeal process that we think will make the process more user-friendly and more responsive to concerns and to continue to work with the States in that process.

We also appreciate the continued participation by the Corps in the North American Waterfowl Management Plan and recognize in some cases that with very little expenditures they can do work in connection with projects that will pay huge dividends in the future.

Last year, with TVA we worked on something called the Clean Stream Initiative, which was trying to put together all the agencies in an area to clean up the damage done by long past coal mining. We would encourage you to encourage TVA to continue that effort, and I think they will. We recognize the importance also of boating, fishing, camping, hunting, wildlife in such areas as lands between the lakes, and we would like to commend TVA particularly for working with the States on a coordinated approach to determine where boat ramps should be and how we can better serve the public in that area.

In many cases the State has funding, other agencies have funding, TVA has funding. It makes sense that they should do joint planning and work together so the public as a whole is served.

We still have one major concern with the Federal Energy Regulatory Commission, and that is that actually you provided in 1992 an amendment that allows for FERC to get money to do studies in advance of project relicensing. That only makes sense from the standpoint of everybody concerned. When I was still with the Forest Service, we worked in California to do a whole bunch of studies before relicensing. That worked to the benefit of everybody, because that gave you the information to work with. If you don't have information to work with, everybody is in the dark in trying to make recommendations. So we strongly recommend that you work with FERC to either provide that they request funding or they provide that that is a cost of the licensee of the relicensing. It is not a lot of money and probably would pay off in the long run.

We have several recommendations here including continued work on water conservation activities of the Bureau of Reclamation. It seems to me that conservation in many places pays good dividends for everybody concerned. Nobody loses on that because you have more water to serve all kinds of needs. So we would applaud that effort of the Bureau of Reclamation and encourage you to encourage them to continue in that direction. Thank you, and I wish you both well in your endeavors.

Mr. MYERS. Thank you.

[The statement of Mr. Peterson follows:]

TESTIMONY BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT ON THE FISCAL YEAR 1997 APPROPRIATIONS FOR THE U.S. ARMY CORPS OF ENGINEERS, BUREAU OF RECLAMATION, FEDERAL ENERGY REGULATORY COMMISSION, AND TENNESSEE VALLEY AUTHORITY

by R. Max Peterson, Executive Vice-President
International Association of Fish and Wildlife Agencies
February 27, 1996

Mr. Chairman I appreciate the opportunity to testify today on behalf of the International Association of Fish and Wildlife Agencies.

The Association, founded in 1902, is a quasi-governmental organization of public agencies charged with the protection and management of North America's fish and wildlife resources. The Association's governmental members include the fish and wildlife agencies of the states, provinces, and federal governments of the U.S., Canada, and Mexico. All 50 states are members. The Association has been a key organization in promoting sound resource management and strengthening federal, state, and private cooperation in protecting and managing fish and wildlife and their habitats in the public interest. I appreciate the opportunity to share our perspectives with you today.

Recognizing that the President's FY 1997 budget has not yet been submitted to Congress, Mr. Chairman, our comments will be somewhat general regarding areas of concern to the Association. We respectfully request the opportunity to provide written supplemental recommendations on each of the agencies' budget once they are released.

U.S. ARMY CORPS OF ENGINEERS

The Association appreciates the recent appropriations actions of this subcommittee for the U.S. Amy Corps of Engineers which have substantially directed the Corps towards more responsible and responsive conservation of our natural resources. The Association applauds the fact that many of our recommendations for recent fiscal years have been incorporated by the Corps in their succeeding year's budget request, or are underway utilizing existing funding.

Our Association particularly appreciates the leadership of this Committee in providing funding for mitigation projects. Most project plans include fish and wildlife as part of the project costs and benefits and as such represent an agreement as to how the project will be developed and operated. Recently, this Committee has followed through by funding some of the promised mitigation. For example, we support the continued mitigation, including riparian restoration, related to the Tennessee-Tombigbee Waterway. We recommend that the Congress explore the need for generic legislative direction to the Corps to ensure that the older projects include the authority for fish and wildlife mitigation and enhancement, and if legislation is necessary, to act on that need.

We support the trend for increased funding of Section 1135 environmental projects. The Association would like to see less limitation on the type of fish and wildlife projects that are eligible for funding under Section 1135. Also, the amount of planning and engineering that has been required on some of these projects makes them cost-prohibitive for states to participate as a cost-share partner. Also, we ask that the Corps allow in-kind match toward the 25% share of the project cost.

The Association is also generally supportive of the funding requested for some of the large river restoration projects such as those planned for the Kissimmee River, Columbia River and the Upper Mississippi. It is in the best interest of the country to restore the habitat and hydrologic components on these rivers that have been significantly altered under previous projects.

The U.S. Fish and Wildlife Service has announced plans to divest its ownership of several fish hatcheries around the nation. This is of concern to us because in many cases hatcheries were included as mitigation for substantial alteration of the stream flow and changed temperatures and consequently made propagation of the native stream fish infeasible. We believe that the continued operation and maintenance of such hatcheries is a continuing project cost that should be borne by project beneficiaries. In some cases, State fish and wildlife agencies are likely to take over maintenance and operations of some of these hatcheries as they have done in the past. Some federal hatcheries are on federal lands managed by the Corps. States will need fee title to the lands and structures on the hatchery grounds in order to make the required continuing investments. In some states fee title is necessary to make such capital investments. We ask that the Corps take necessary steps to transfer these particular lands to the states. This will enable some states to assume responsibility for maintenance and operation of hatcheries.

With regard to the Corps' regulatory authority under the Clean Water Act of 1972, we strongly support the implementation of a streamlined program to process, review, issue permits and provide an appeals procedure for the permitting of activities in waters of the United States, including wetlands associated permits and jurisdictional determinations as well as sand and gravel dredging activities. The Association believes a strong partnership program with state agencies affords the best opportunity for balanced conservation of aquatic resources.

The Association urges continued appropriations for assisting in the control of zebra mussels. As you are aware, these non-indigenous mollusks are having significant adverse effects on native shellfish and natural habitats.

The Association recommends that the Corps continue in partnership with State Fish and Wildlife Agencies to initiate applicable restoration, mitigation and conservation projects. For example, we request the Corps continue to participate in the North American Waterfowl Management Plan through wetlands conservation, wetlands identification, and wetlands acquisition.

The Association recommends that the Corps continue to work closely with the State fish and wildlife agencies to identify priority restoration, mitigation and remediation projects needing the Corps' attention. The State fish and wildlife agencies are generally aware of where Corps projects could most effectively enhance the status of fish and wildlife resources through improvements to habitat. In particular, we encourage the Corps to participate in funding projects to meet the objectives of the North American Waterfowl Management Plan.

TENNESSEE VALLEY AUTHORITY (TVA)

The Association recommends that TVA actively support and participate in the States' Clean Stream Initiative with the Office of Surface Mining (OSM) to complete projects in the TVA service area. These state-Federal-private cooperative projects are engaged in restoring fish, aquatic life, recreational and economic opportunity in watersheds damaged by acid mine drainage from past coal mining activities.

The Association recognizes the importance of boating, fishing, camping, hunting, wildlife observation, and other conservation-oriented activities at Land Between the Lakes (LBL) and support continued funding for these activities.

The Association commends TVA for focusing on a coordinated effort with the States to provide public access and boat launch facilities. Tourism associated with TVA facilities is essential to the economic well being of adjacent communities and we strongly support sustained funding for these activities.

We are encouraged that TVA has undertaken a serious review of public lands along TVA reservoirs and rivers to insure these properties are not utilized in such a manner as to exclude reasonable public use. Further, we support current and future planning efforts that insure conservation and protection of riparian habitat.

The Association was disappointed that the Challenge Cost share program initiated in FY 95 was not included in the FY 96 request. Program success in 1995 was evident as matching funds were found at a ratio of 3:1 and may worthwhile projects were initiated. The Association, in recognition of these fiscally difficult times, recommends that the TVA re-institute the challenge cost program within available funds and emphasize cooperative access development and boat launch construction.

FEDERAL ENERGY REGULATORY COMMISSION (FERC)

The Association recommends a Congressional appropriation to allow FERC to reimburse state fish and wildlife agencies for studies and reviews associated with hydropower relicensing activities. Section 1701 of the Federal Power Act was amended in 1992 specifically to authorize reimbursement to states for this work. FERC has never sought appropriated funds for this purpose. If appropriated funds cannot be provided, FERC should be instructed to require reimbursement for this work by the licensee. Otherwise, projects will be proposed for relicensing without adequate studies of appropriate fish and wildlife licensing requirements. This invites conflict and possibly more stringent requirements, including water releases, than would be needed if more adequate studies were made.

BUREAU OF RECLAMATION

The Association recognizes with appreciation the continued BOR shift toward non-structural water resources management objectives. The enhanced water conservation, reclamation and partnership themes of last year's budget request certainly makes sense in the climate of the times. The Association notes with particular appreciation the number of projects specifically designed to enhance and restore fish and wildlife resources associated with BOR holdings.

Water Conservation and Reuse - BOR has recently requested funding for new water management and conservation activities. This request for added funding for these activities, funds made available largely through reductions in other more traditional activities, is supported by the Association. Among the types of work proposed are improvements in Colorado River operations, including new approaches to water salinity control; irrigation management improvements; and water reclamation and reuse projects in California. Water conservation is a "winner" for the entire spectrum of water uses and can significantly reduce conflict in water shortage situations.

Central Valley Projects - It is most appropriate, and strongly supported by the Association that the BOR continue to use significant funds from the Central Valley Project Restoration Fund for much needed and overdue actions to benefit conservation efforts associated with the Central Valley Project. The habitat restoration and improvement, screening of inlets, and acquisition of water for refuge resources, and the continued work on the water temperature control capabilities at Shasta Dam will help restore fish and wildlife resources that have been adversely impacted by this project. This is another example of project changes that reduce the impact on fish and wildlife resources, without adverse effect on other project users.

Columbia/Snake River Salmon Recovery Project - While it is truly unfortunate that steps to remedy fish passage problems in these rivers necessitated a jeopardy biological opinion, it is recognized with appreciation that the FY 96 BOR budget included funding for water to provide flows to enhance downstream migration of young fish. We would urge a comparable funding consideration in the FY 97 budget. Adequate and safe conveyance capability for young fish is absolutely essential to restoring salmon populations and it is doubtful that current restoration efforts will be successful without reliable solutions to this long standing problem.

Water Development - In past years, the Association has urged the BOR to become a more active participant in wetlands projects and continue to advocate that position. Wetland conservation, restoration and protection are key ingredients to the success of the North American Waterfowl Management Plan and the Partners in Flight initiative. We were disappointed that

BOR decreased its request in FY 96 for Wetlands Development, and urge the agency to request a budget for wetlands development comparable to FY 95 appropriated levels. Very small efforts at some bureau projects would have very high payoffs.

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TUESDAY, FEBRUARY 27, 1996.

INLAND AND INTRACOASTAL WATERWAYS

WITNESS

JOSEPH E. LEMA, VICE PRESIDENT, MANUFACTURERS AND SERVICES DIVISION, NATIONAL MINING ASSOCIATION

Mr. MYERS. Joe Lema, Vice President of the Manufacturers and Services Division of the National Mining Association. Your prepared statement will be placed in the record.

Mr. LEMA. Thank you, Mr. Chairman. It is an honor to be here. I am Joe Lema, Vice President for the Manufacturers and Services Division of the National Mining Association. It has been a privilege for me to testify before this subcommittee on many occasions on behalf of the coal industry, and now I am grateful to appear on behalf of all mineral extractors. I am especially grateful to have the honor of appearing before two exceptionally distinguished gentlemen as they complete their tenure in the Congress, Chairman John Myers of the great Hoosier State of Indiana, and previous Chairman John Bevill of the great State of Alabama.

I am accompanied by our Vice President for Congressional Affairs, Susan Carver; and our Director of Transportation for the National Mining Association, Merrill McKenzie.

We, the mining industry, including producers, shippers and consumers of many mining products, are principal users of the inland waterway system of the United States. Inland waterways freight traffic now amounts to approximately 620 million tons annually, of which coal represents 30 percent of total annual tonnage transported by barge, and other nonmetallic minerals amount to an additional 15 percent. Overall, inland waterways freight tonnage is expected to increase 10 percent by the year 2010, with coal traffic alone growing by 22 percent.

The mining industry seeks the approval of this subcommittee for the continuation of project construction funding at four sites, the start of construction at two additional sites, and the completion of a feasibility study of construction needs on a critical segment of the interconnected waterway system.

We strongly urge your approval of lock and dam construction project funding in fiscal year 1997 at Olmsted, replacing Locks and Dams 52 and 53, and McAlpine at Louisville, Kentucky, near Jeffersonville and New Albany, Indiana, Locks and Dams 2, 3 and 4 on the Monongahela River; Winfield and Marmet on the Kanawha River, and the Kentucky Lock and Dam addition on the Tennessee River near Paducah.

Further, we urge approval of funds required for the U.S. Army Corps of Engineers to complete a feasibility study of the need for lock and dam project construction on the lower Ohio River from its mouth to the Mississippi River near Cairo, Illinois, upstream to Louisville, Kentucky, near Jeffersonville and New Albany, Indiana.

Mr. Chairman, the NMA realizes and appreciates the leadership of this subcommittee in funding critical waterway construction projects in the previous decade plus construction starts at previously mentioned projects, and preconstruction engineering and design for potential construction projects.

In conclusion, NMA requests your continued support for the efforts I have identified and presented in the statement filed for the record for this hearing. Thank you.

Mr. MYERS. Thank you.

Susan you have been coming for a good many years, I will not give away your age.

Merrill, good to have you.

[The statement of Mr. Lema follows:]

STATEMENT OF JOSEPH E. LEMA
VICE PRESIDENT, MANUFACTURERS AND SERVICES DIVISION
NATIONAL MINING ASSOCIATION

BEFORE THE
APPROPRIATIONS SUBCOMMITTEE
ON ENERGY AND WATER DEVELOPMENT
UNITED STATES HOUSE OF REPRESENTATIVES

WASHINGTON, D.C.
FEBRUARY 27, 1996

SUMMARY

Mr. Chairman and members of the Subcommittee, my name is Joseph E. Lema. I am vice president of National Mining Association's Manufacturers and Services Division. NMA's member companies produce and process coal, metallic ores, and nonmetallic minerals. Our member companies further include mining machinery and equipment manufacturers, suppliers of mine-related materials, consumers of mine products, and firms engaged in providing professional services associated with minerals production and distribution. Reliable, timely, and efficient barge transportation services on our system of interconnected inland and intracoastal waterways developed to enable commercial navigation in mid-America with access to the Gulf of Mexico are key elements of our Nation's freight transportation network for the distribution of mine products. With that in mind, NMA urges this Subcommittee to approve Fiscal 1997 appropriations to start or continue construction at key lock and dam projects focusing on elimination of traffic capacity constraints and replacement of aged, deteriorated structures and operating equipment at critical locations on the inland waterways system, and completion of a feasibility study on a key waterways segment, specifically:

- project construction at McAlpine and Olmsted on the Ohio River; Locks and Dams 2, 3, and 4 on the Monongahela River; Winfield and Marmet on the Kanawha River; and Kentucky Lock Addition on the Tennessee River; and
- feasibility study of lock and dam projects on the Lower Ohio River to analyze collective requirements for construction of improvements in the stretch from the mouth of the River near Cairo, Illinois upstream to Louisville, Kentucky.

These projects represent sound investments in our Nation's freight infrastructure. Annual barge traffic of approximately 620 million tons today, with coal and other mine products accounting for 45 percent of total tonnage utilizing the waterways system, is expected to rise by about 10 percent by 2010. Coal traffic itself is forecast to grow 22 percent. That increase in demand for barge transportation services underscores the importance of funding priority improvement projects without delay.

A MODERN WATERWAYS SYSTEM IS A VITAL ASSET PROVIDING FOR EFFECTIVE DISTRIBUTION OF MINE PRODUCTS

The inland waterways system already accommodated 620 million tons of barge freight in 1994, a level which likely was exceeded in 1995 according to the U.S. Army Corps of Engineers. Mine products represent a major share of total waterways tonnage, with coal traffic accounting for about 30 percent of inland waterway traffic and metallic ores and nonmetallic minerals amounting to another 15 percent of total traffic. Thus 280 million tons of mine products, including 180 million tons of coal, are being moved annually on the waterways. That equates to about seven to ten million truckloads or 25 to 35 thousand trainloads of freight required to move the same tonnage had it not been carried by barge tows, thereby substantially affecting the movement of other surface passenger and freight traffic, increasing congestion, significantly increasing fuel consumption for transportation purposes, and adding more vehicle emissions due to mobile sources of pollutants to the atmosphere. Clearly, the record shows that a modern waterways system is a vital transportation asset to our Nation, one that contributes highly to raising fuel efficiency with regard to the movement of freight, and lowering the amount of emissions that otherwise would negatively impact clean air programs.

At 180 millions tons of coal moved annually on the waterways today, we have experienced an increase of nearly 40 percent since the mid-1970's. Under the mid-range forecast of the U.S. Army Corps of Engineers, waterways coal traffic is expected to increase to over 220 million tons annually by 2010, a growth of more than 22 percent. In addition, nonmetallic minerals such as sulphur, salt, and various aggregates generally employed for construction purposes are forecast to rise from 86 million to more than 100 million tons annually in the same period, 1994 to 2010. High current volumes of barge traffic and major increases expected over the next 15 years, coupled by the fact that many lock and dam structures are aged, deteriorated, and under-sized for modern barge tows, have led NMA and its predecessor, the former National Coal Association, to strongly support an orderly program of lock and dam construction projects funded through the leadership of this key Subcommittee during the past decade.

Your important legislative initiatives during the period 1986 to the present have accomplished much improvement at critical lock and dam projects already, and a number of yet-to-be-completed construction projects are now in progress beyond several which have been completed and are open for navigation. Included are projects on the Black Warrior, Mississippi, Monongahela, and Ohio Rivers which have removed severe bottlenecks. Others under construction on the Kanawha, Monongahela, and Ohio Rivers under existing authorizations are soon to be completed.

The Ohio River and connecting segments of the Kanawha, Monongahela, Green, Cumberland, and Tennessee Rivers form a navigation system connected to the Mississippi River which flows from the North Central states to the Gulf of Mexico establishing an enormous path for marine commerce in mid-America, linking with trains to the western states and with dry-bulk vessels at ports on the Gulf serving coastal states like Florida and overseas ports around the world. The efforts of this Subcommittee are succeeding in preserving the effectiveness of that mid-America system of valuable inland and intracoastal waterways. The waterways system today is highly used for commercial transportation, along with other purposes like water supply and recreational boating. Its navigation structures also aid those non-navigation objectives together with flood control purposes. Therefore, there are many beneficiaries of a healthy waterways system, both commercial and non-commercial in nature.

Our objective at this hearing on Fiscal 1997 appropriations is to urge this Subcommittee to continue leading the preservation of a sound inland and intracoastal waterways system, by now approving the funding of well justified lock and dam construction projects: two on the Ohio River in Illinois, Indiana, and Kentucky, two on the Kanawha River in West Virginia, one on the Tennessee River in Kentucky, and one comprised of three sites on the Monongahela River in Pennsylvania, and by encouraging the U.S. Army Corps of Engineers to expedite completion of a study of lockage capacity on what might be called the "super service segment"of mid-America's waterways system, specifically the Ohio River from its mouth at the Mississippi River upstream to Louisville, Kentucky.

THE AGED, UNDERSIZED LOCKS AT MARMET ON THE KANAWHA RIVER IN WEST VIRGINIA SHOULD BE REPLACED NOW IN STEP WITH THE CURRENT CONSTRUCTION DOWNSTREAM AT WINFIELD

The Kanawha River in West Virginia is an important route for coal traffic originating from nearby mines and carried by barge tows downstream from above the Marmet project through the Winfield project to the Ohio River from which it moves to many coal-fired utility plants in mid-America and, through the Ohio River's connection with the Mississippi River, to coal-fired utility plants in southern states and to overseas coal consumers accessible from the Gulf of Mexico.

Lockage delays on the Kanawha River are serious. The Winfield project just downstream from the Marmet project experiences barge tow delays that average 12 hours, and delays of 24 hours are not uncommon. Further, most of the coal carried by barge tows through the Winfield project originates from barge loading docks upstream above Winfield and must first pass through the Marmet pool and the obsolete Marmet locks and dam. At Winfield the presently authorized construction project is moving forward. The U.S. Army Corps of Engineers plans a mid-1997 opening date for the improved facility. However, the delay problems on the Kanawha River must be corrected not only by building the new 110-foot by 800-foot lock at Winfield, which is soon to be completed, but also by building a complementary new 110-foot by 800-foot lock at Marmet. Preconstruction engineering and design is now in progress for the Marmet project; therefore, it is not only timely to authorize project construction at Marmet, it also is both warranted and desirable to assure that the benefits of the Winfield project are not diminished by continuing under capacity performance at Marmet.

THE KENTUCKY LOCK ADDITION PROJECT ON THE TENNESSEE RIVER IS AN UNDERTAKING WHOSE TIME HAS COME TO ENABLE EFFECTIVE ACCESS BY BARGE TOWS IN THE TENNESSEE VALLEY

The existing Kentucky Lock and Dam on the Tennessee River in Kentucky near Paducah and just upstream from the mouth of the Tennessee River at its Ohio River junction is hampered seriously by having only a single 600-foot lock rather than a modern 1200-foot lock chamber which is the standard dimension on the lower Ohio River with which Tennessee River barge traffic must connect. The inefficiencies brought about by inadequate lockage capacity should be overcome now by the addition of a 1200-foot lock chamber enabling effective access to the Tennessee Valley, including the states of Alabama, Tennessee, and Kentucky. This project is the gateway to the Tennessee River Valley at a juncture with the "super service segment" of the Ohio River upstream from the Ohio River's mouth at the Mississippi River.

Currently 20 million out of a total of approximately 50 million tons of freight carried by barge tows on the Tennessee River annually are coal traffic, with another 14 million tons comprised of other nonmetallic minerals. The Tennessee River Valley joins with the Ohio River Valley as sites for many coal-fired utility plants having the benefit of access to the coal fields of the east, the midwest, and the west by intermodal rail/barge and truck/barge transportation services. Further, the lower Ohio River and nearby middle Mississippi River segments of the waterways system, linked at Cairo, Illinois are locations for several modern river barge terminals well equipped for coal storage, blending, and intermodal transfer operations, making that area a major hub for coal transshipment and service to utility plants in the east, the midwest, the southeast, and the southwest, together with export terminals located at the Gulf of Mexico. As coal is the low cost fuel of choice for generating 56 percent of the Nation's electricity, that intermodal coal distribution capability involving the junctures of the middle Mississippi, lower Ohio, and lower Tennessee Rivers in the vicinity of the Kentucky Lock on the Tennessee River makes the Kentucky Lock Addition project particularly important.

THE "SUPER SERVICE SEGMENT" OF THE OHIO RIVER FROM ITS MOUTH AT THE MISSISSIPPI RIVER UPSTREAM TO LOUISVILLE, KENTUCKY REPRESENTS A WATERWAYS SUBSYSTEM WHICH NOW MUST BE ANALYZED TO EVALUATE ADDED PROJECT NEEDS

The lower Ohio River is a remarkable avenue for significant transportation services carrying high volumes of upbound and downbound traffic and characterized by having many modern bulk commodity terminals in place to expedite materials storage, handling, and transfer into and out of barges, trucks, and trains. In 1994 the Ohio River carried 237 million tons of freight, 134 million tons, or 57 percent, of which were coal tonnage. The upbound traffic was 111 million tons and the downbound traffic was 126 million tons. Those represent exceedingly high, two-way freight movements, normally handled by barge tows in which a towboat pushes 15 barges arrayed three across and five in line with the towboat. That configuration necessitates a lock chamber which is 110 feet wide and 1200 feet in length to accommodate the barge tow in a single maneuver through the lock, without a need to break the tow and move barges through the chamber incrementally causing significant delays and creating a potential for mishaps in the course of lashing and unlashing the barges and holding some of them at moorings while others are passed though the lock.

It is apparent, from a systems design viewpoint, and with the realization that two-way barge traffic of such a high magnitude already is being experienced on the lower Ohio River and will increase in the coming years, that the locks and dams on the lower Ohio River from its mouth at Cairo, Illinois upstream to Louisville, Kentucky must be critically examined to determine when, not if, certain structures should be expanded. That need is amplified when considering that a project that has only a single 110-foot by 1200-foot lock chamber, even though it may also have a smaller auxiliary chamber, will become seriously impaired in handling barge traffic of the type prevailing on the lower Ohio River when the main lock chamber is shut down for maintenance and repair operations which often take several days or weeks to perform. NMA urges the Subcommittee to furnish appropriations of $2,600,000 for completion of a capacity study of lockage improvement on the lower Ohio River "super service segment" of the waterways system.

FISCAL 1997 APPROPRIATIONS ARE URGED TO CONTINUE PROJECTS ON THE OHIO RIVER, THE MONONGAHELA RIVER, AND THE KANAWHA RIVER IN THE UPPER OHIO RIVER BASIN WHERE CONSTRUCTION IS IN PROGRESS TO REPLACE OBSOLETE LOCK AND DAM STRUCTURES

Mr. Chairman and members of the Subcommittee, I have made lengthier mention of the Marmet Locks and Dam and the Kentucky Lock Addition projects inasmuch as preconstruction engineering and design has been performed for those sites, and early start of construction is desirable with Fiscal 1997 funding. At four other projects construction starts have been initiated earlier. Some are in the process of land acquisition while others have on-site work in progress. Accordingly, NMA urges approval for continuation of project construction in Fiscal 1997 for:

- Olmsted on the Ohio River replacing Locks and Dams 52 and 53;
- McAlpine on the Ohio River at Louisville, Kentucky;
- Winfield on the Kanawha River upstream from the Ohio River; and
- Locks and Dams 2, 3, and 4 on the Monongahela River near Pittsburgh.

In conclusion, Mr. Chairman and members of the Subcommittee, NMA urges Fiscal 1997 appropriations for selective new and continuation projects in addition to a forward-looking analysis of additional requirements to allow orderly, priority-based project scheduling. Thank you for giving NMA this opportunity to testify on behalf of the mining industry. I will be glad to answer questions and to respond with more information in writing pursuant to your wishes.

TUESDAY, FEBRUARY 27, 1996.

PACIFIC NORTHWEST ISSUES

WITNESSES

DAN JAMES, FEDERAL AFFAIRS REPRESENTATIVE, PACIFIC NORTHWEST WATERWAYS ASSOCIATION

MIKE THORNE, EXECUTIVE DIRECTOR, PORT OF PORTLAND

KEITH A. LEVITT, MANAGER, PORTS DIVISION, OREGON ECONOMIC DEVELOPMENT DEPARTMENT

MIKE SALSGIVER, OREGON PUBLIC AFFAIRS, INTEL CORPORATION

Mr. MYERS. Next, to introduce the Pacific Northwest, is our own Representative here, Congressman Bunn.

Mr. BUNN. Thank you, Mr. Chairman. We have four individuals to provide information on Northwest issues, Dan James with the Pacific Waterways Association; Mike Thorne, Port of Portland; Keith Leavitt, Ports Division, Oregon Economic Development Department, and Mike Salsgiver, Intel Corporation. Welcome.

Mr. JAMES. Thank you.

Good morning, Mr. Chairman. I am Dan James, Federal Affairs Representative, Pacific Northwest Waterways Association. Chairman Myers, Chairman Bevill, Mr. Frelinghuysen, Mr. Bunn, thank you for having our group appear this morning.

The Pacific Northwest Waterways Association represents ports, tug and barge lines, river shippers, electric utilities, manufacturers, agriculture and forest products producers along the Columbia/Snake River System and throughout the Pacific Northwest.

Our members wish to thank the committee for its support of Pacific Northwest transportation, hydropower, nuclear waste cleanup and salmon enhancement programs in recent years. This year we especially wish to thank Chairman Myers and Chairman Bevill for their leadership of the committee and Congress. It has been an honor for me and for my association to appear before you over the years, and we wish you well.

We would also like to thank your constituents in Alabama and Indiana for sharing you with the Pacific Northwest.

We wish to express our support for appropriations for the following:

Full funding for the Continuing Authorities Programs and ongoing construction and operations and maintenance of the federally authorized navigation channels in the Columbia/Snake River System, the Washington and Oregon Coastal ports, and Puget Sound; the feasibility study of the lower Columbia River channel deepening project; and the Coos Bay, Oregon channel deepening project.

Full funding for the restoration of the Newport Breakwater at Newport, Oregon;

Full funding for construction on the Bonneville Dam powerhouses;

Continued funding of the U.S. Department of Energy cleanup at Hanford;

Selected salmon recovery actions such as improved and enhanced smolt transportation, surface collection and other smolt bypass facilities, habitat restoration and protection, and predator control.

There are several other issues that we wish to raise with the committee:

We encourage the committee to maintain the four Federal hopper dredges operated by the U.S. Army Corps of Engineers. The coastal and river ports of the Pacific Northwest rely heavily on the regional placement, responsiveness and capacity of these dredges. To remain competitive in world markets, Northwest ports and their customers rely on hopper dredges for low-cost and timely completion of dredging requirements.

The Federal hopper dredges may soon play an important role in our region's recovery from recent flooding. The Corps is now evaluating the impact of the floods on the Federal navigation channels. There is anecdotal evidence that the floods may increase the need for dredging in the Columbia by as much as one-third this year.

We support the Corps' plans to increase effectiveness and reduce costs. However, we do not support proposals for future years that would drastically reduce Corps programs and O&M budgets. The Corps supports the entities that turn the Nation's rivers and harbors into economic and recreational benefits;

We are opposed to proposals to shift Mitchell Act hatchery funding into the Bonneville Power Administration budget;

We encourage the committee to direct the Corps to remove the John Day drawdown and continued study of the Snake River drawdown from the System Operation Review preferred alternative, and to deny future requests for funding of drawdowns or drawdown studies; and

We believe that the Federal Government should participate in the funding of salmon recovery measures under the Endangered Species Act and the Northwest Power Act. This would provide both administrative and congressional oversight that would result in recovery plans that have greater biological basis and are more cost-effective than the current NMFS draft.

On behalf of 140 members from throughout the Pacific Northwest, we thank the committee for giving us this opportunity to review a number of issues important to the environmental and economic prosperity of our region.

[The statement of Mr. James follows:]

Summary Testimony of
Dan James, Federal Affairs Representative
PACIFIC NORTHWEST WATERWAYS ASSOCIATION
P.O. Box 61473, Vancouver, WA 98666-1473, (360) 699-4666
Before the Subcommittee on Energy and Water Development
Committee on Appropriations, U.S. House of Representatives
February 27, 1996

Summary of Appropriations Request

The Pacific Northwest Waterways Association represents ports, tug and barge lines, river shippers, electric utilities, manufacturers, and agricultural and forest products producers along the Columbia/Snake River System and throughout the Pacific Northwest. Our members wish to thank the Committee for its support of Pacific Northwest transportation, hydropower and salmon enhancement programs in recent years

We wish to express our support for appropriations for the following:

- The Continuing Authorities Programs and ongoing construction and operations and maintenance (O&M) of the federally authorized navigation channels in the Columbia/Snake River System, the Washington and Oregon Coastal ports, and Puget Sound;
- Full funding for the Coos Bay, Oregon channel deepening project and the feasibility study of the lower Columbia River channel deepening project;
- Full funding for the restoration of the Newport Breakwater at Newport, Oregon;
- Full operations and maintenance of the region's hydropower system;
- Full funding for construction on the Bonneville Dam powerhouses;
- Continued funding of the U.S. Department of Energy cleanup at Hanford;
- Selected salmon recovery actions such as improved and enhanced smolt transportation, surface collection and other smolt by-pass facilities, habitat restoration and protection, and predator control, and

There are several other issues that we wish to raise with the Committee:

- We encourage the Committee to maintain the four federal hopper dredges operated by the U S Army Corps of Engineers (Corps);
- We support the Corps' plans to increase effectiveness and reduce costs However, we do not support proposals for future years that would drastically reduce Corps programs and O&M budgets The Corps supports the entities that turn the nation's rivers and harbors into economic and recreational benefits;
- We are opposed to proposals to shift Mitchell Act hatchery funding into the Bonneville Power Administration budget;
- We encourage the Committee to direct the Corps to remove the John Day drawdown and continued study of the Snake River drawdown from the SOR preferred alternative, and to deny future requests for funding of drawdowns or drawdown studies; and
- We believe that the federal government should participate in the funding of salmon recovery measures under the Endangered Species Act and the Northwest Power Act. This would provide both administrative and Congressional oversight that would result in recovery plans that have greater biological basis and are more cost-effective than the current NMFS draft.

Testimony of
Dan James, Federal Affairs Representative
PACIFIC NORTHWEST WATERWAYS ASSOCIATION
P.O. Box 61473, Vancouver, WA 98666-1473, (360) 699-4666
Before the U.S. House of Representatives
Committee on Appropriations
Subcommittee on Energy and Water Development
The Honorable John T. Myers, Chairman
February 27, 1996

The Pacific Northwest Waterways Association appreciates the opportunity to present its views on appropriations issues to the Committee. PNWA membership includes 140 organizations and individuals in Oregon, Washington, and Idaho. PNWA represents:

- Public port authorities on the Pacific Coast, Puget Sound, and Columbia/Snake River System;
- Public utility districts, investor-owned utilities, and direct service industries;
- Irrigation districts, grain growers and upriver and export elevator companies;
- Major manufacturers in the region;
- Forest products industry manufacturers and shippers; and
- Tug and barge operators, steamship operators, consulting engineers, and others involved in economic development throughout the Pacific Northwest.

PNWA has a long history of working with the Committee and the U.S. Army Corps of Engineers on projects of regional and national importance, sharing the challenge to maintain and develop our transportation infrastructure. Our members wish to thank the Committee for its support of Pacific Northwest transportation, hydropower and salmon enhancement programs and projects it has funded in previous years.

MINIMUM DREDGE FLEET

We encourage the Committee to maintain the four federal hopper dredges operated by the Corps The coastal and river ports of the Pacific Northwest rely heavily on the regional placement, responsiveness and capacity of these dredges. To remain competitive in world markets, Northwest ports and their customers rely on hopper dredges for low-cost and timely completion of dredging requirements

The federal hopper dredges may soon play an important role in our region's recovery from recent flooding. The Corps is now evaluating the impact of the floods on the federal navigation channels. There is anecdotal evidence that the floods may increase the need for dredging in the Columbia by as much as one-third this year. The federal hopper dredges have been called upon in other regions when floods have required increased emergency and operations and maintenance dredging. Even without floods, emergency dredging is often needed to restore the federal navigation channel to allow commerce to pass. Shoaling can occur very rapidly, and it has a potentially dangerous impact on export shipping and the sport and commercial fishing fleet. Shippers and ports cannot afford to wait several weeks for dredging while private contractors are engaged and move their dredges to the site of the work. Trade commitments and vessel safety are at risk.

It is unclear if the private dredge industry has sufficient medium and large class hopper dredge capacity to allow ships to take full advantage of the authorized channels, and to respond quickly to the non-routine emergency dredging needs of small and medium sized ports on the Oregon and Washington coasts. We are also concerned that the low number of private industry bids for work in our region could force dredging costs higher were it not for the availability of the federal dredges We believe that the presence of the federal dredges keeps bids for dredging work competitive and lower in cost.

CONTINUING AUTHORITIES

We wish to thank the Committee for its support of the Corps' Continuing Authorities Programs in the 1996 conference report. We agree that these programs are of great value to many small communities throught the Pacific Northwest and the nation.

OPERATIONS AND MAINTENANCE FOR NAVIGATION

We ask the Committee for full funding for ongoing operations and maintenance (O&M) of the federally authorized navigation channels in the Columbia/Snake river system, the Washington and Oregon Coasts and the Puget Sound. Maximizing O&M is a cost-efficient means of fully utilizing the federal government's investment in channel operations We would also like to make the Committee aware that resources in the Corps' North Pacific Division are being stretched due to their response to recent flooding in the Pacific Northwest. We look forward to working with the Committee to assist the Corps in their efforts.

We urge the Committee to resist any proposals which would drastically reduce Corps funding for basic services, including the maintenance of both inland waterways and shallow and deep draft ports and harbors. Over 20 percent of the employment in the Northwest states is directly related to international trade. These navigation projects are among the few federal programs that are analyzed to ensure that economic benefits exceed the costs We wish that all federal programs could meet this standard We also encourage the Committee to continue to reject proposals to eliminate flood control and beach replenishment. These proposals would have had a profound effect on Corps beneficiaries throughout the country.

DEEP DRAFT CHANNEL DEEPENINGS

The Columbia River deep draft channel is the lifeblood of the Columbia/Snake River System To protect future growth and development of the River System, we ask the Committee to continue to fund the federal share of the feasibility study of the lower Columbia River Channel Deepening Project This funding would pay for the federal government's share of the study to investigate improving the existing 40-foot navigation channel by increasing the channel depth to 43 feet

We wish to thank the Committee for authorizing the Coos Bay, Oregon channel deepening project last year We encourage the Committee to appropriate the remaining federal share this year to fulfill the commitment made upon successful completion of the study phase and last year's authorization We have asked the Corps to reprogram funds to allow construction to begin on May 1 This will deepen the existing channel from 45 to 47 feet at the entrance and from 35 to 37 feet in the 15-mile inner channel

NEWPORT BREAKWATER

We encourage the Committee to fund the restoration of the Newport, Oregon Breakwater, which needs major extension and repair Carrying out this project will mean better protection for those vessels using the inner harbor, and will allow for continued growth of this important West Coast fishing port

BONNEVILLE DAM POWERHOUSES

We encourage the Committee to fund the remainder of phase I and ongoing construction for phase II of the major rehabilitation of the Bonneville Dam powerhouses

OPERATIONS AND MAINTENANCE OF THE REGION'S HYDROPOWER SYSTEM

We would like to thank the Committee for its decision last year to impose an annual cap on salmon recovery costs. We are hopeful that the Bonneville cost-cap, even though it has some flexibility, will force a prioritization of recovery measures, and implementation of cost effective measures The cost cap means that the region and the country can no longer afford to add more and more requirements without scientific justification. In that vein, we encourage the Committee to direct the Corps to remove the John Day drawdown and continued study of the Snake River drawdown from the System Operation Review preferred alternative, and to deny future requests for funding of drawdowns or drawdown studies. We encourage you to remain skeptical of drawdown proposals.

As the Committee is aware, on December 4 the National Research Council (NRC) released its study on salmon recovery efforts. The NRC Committee concluded that the transportation of smolts is the "most biologically and economically effective way to help them get past the dams" They said drawdown, except to river grade, was not proven to benefit the fish. "Dam removal and drawdown to river grade would help, but they are too costly" The NRC Committee project director indicated during briefings that "focusing on the hydro system alone will not solve the problem. The Columbia River is only one piece of the puzzle."

Our reading of the Bevan team recommendations in the NRC report indicates that they continue to discredit drawdowns. This is true of the reservoir survival study results in the Williams-Skalski-Iwomoto study over the last two years that show reservoir mortality is negligible We see no value in continuing to spend time and money on more drawdown analysis or on drawdown implementation, for example, in the Snake River Environmental Impact Statement that is now underway Flow augmentation may aid survival, but there is no scientific justification for the massive volumes that were called for last year Likewise, judicious application of spill may help in some circumstances, but large volumes of spill increase nitrogen supersaturation to lethal levels

SALMON RECOVERY DECISION AUTHORITY AND FUNDING

While we support efforts to improve the processes governing the region's fish and wildlife programs, we are concerned that some proposals will decrease, not increase accountability One reason for our concern is that some discussions about "regional control" only seem to involve the federal, state and tribal fish agencies who have a vested interest in higher, not lower, fish and wildlife expenditures We believe that those who are paying for these programs are not as close to the decision-making process as they should be

We also believe it is appropriate to consider a federal cost share for ESA recovery programs By that, we mean federally appropriated funds This makes sense to us for two reasons The first is that the region is already paying more than any other region in the world for endangered species protection

Secondly, there are no checks and balances on the federal agencies or the Power Planning Council They simply demand more each year Without biological monitoring and without scientific justification, the region's costs have increased at an explosive rate. One way to ensure that the federal agencies employ biologically sound and cost-effective measures is to make them responsible for a significant portion of the cost Federal government participation in paying for recovery measures would bring far greater accountability to the agencies The benefits would increase and the costs would go down The Administration and Congress would have a far greater opportunity to make sure that the agencies provide maximum benefit at the lowest possible cost

We encourage providing the region with significant decision making authority while including a mechanism for federal cost share.

MITCHELL ACT HATCHERIES

Funding for these hatchery programs were exhausted this year, prompting the early release of millions of smolts from Mitchell Act hatcheries. We encourage the Committee to correct this problem this year by providing adequate funding for these programs. In past years the Administration has proposed a shift in Mitchell Act hatchery funding into the Bonneville Power Administration budget. We oppose this. As with other measures, to ensure control and oversight, the hatcheries should continue to be funded by the federal government. We also believe that reinstatement of Mitchell Act funding should be contingent upon the marking of all hatchery fish.

HANFORD CLEANUP

We ask the Committee to continue to adequately fund the Department of Energy cleanup of 45 years of accumulated defense waste currently stored at the Hanford site. We recognize that defense waste cleanup is a long-term project that will be most cost effective and most rigorously pursued if Hanford is a viable, operating site. Therefore, we strongly urge the Committee to support a complete, ongoing Hanford scientifically and technologically based research and operations program in order to ensure long-term funding for waste cleanup.

CONCLUSION

On behalf of 140 members from throughout the Pacific Northwest, we thank the Committee for giving us this opportunity to review a number of issues important to the environmental and economic prosperity of our region.

Mr. THORNE. Good morning. For the record, I am Mike Thorne, the Executive Director of the Port of Portland. My testimony here will reflect the views of the seven lower Columbia River ports, including ports in both Oregon and Washington.

On a personal note, the Pacific Northwest sounds to me like it joins with the whole country in recognizing the contributions, Chairman Myers and Chairman Bevill, that you have given to providing what has to be a very fine national transportation system. So we join in expressing our appreciation.

In my brief testimony today, in addition to stressing the importance of acting on a water resources bill this year, I want to emphasize three things. The third item, dealing with the Corps' hopper dredge fleet, will be a part of the written comments that we have turned in, and I will not mention them this morning in the interests of time. The other two items have to do with the regional and national significance of the Columbia River Channel Deepening Project and the need for the next round of feasibility study appropriation; and then, secondly, to talk about the need for Congress to reassert the importance of the Corps of Engineers' role in maintaining our national navigation channels.

Foreign trade is an increasingly important part of the U.S. economy. The Columbia River system, which exports more than it imports, is a strong contributor to our national trade picture. Maintaining and improving our waterways is the linchpin to access in overseas markets. As you know, larger vessels are being built, which will necessitate deeper channels at some ports and even more diligent maintenance at existing depths.

We expect our national trade significance to continue. Today the Columbia River system can count many strengths: Export volumes are increasing because of a good transportation and intermodal connection between our region and other parts of the Nation and a relatively uncongested harbor and dock system, which means we can provide timely access to just-in-time manufacturing. We have one major weakness, the fact that we have a current 40-foot channel that needs to be authorized at a deeper level.

Nearly a decade ago we began planning the Columbia River improvement project, knowing larger vessels were coming. Reality has caught up with us and the larger vessels are here today. At present, the new larger container and grain ships calling in Portland and other Columbia River ports often must leave only partially loaded. This is so-called light loading, which means export cargo is left on the dock and vessels are not using their maximum efficiency.

To give you an indication of the value, one foot of draft equates to 2,000 tons of cargo. On the basis of wheat that is about $325,000 and on the basis of container cargo average, it is about $2.5 million. The cargo left sitting on the dock when the ship leaves, then, less than fully loaded, means lost business for our U.S. shippers as well as manufacturers. To put that into more perspective, the Portland Harbor is the largest wheat exporting harbor in the United States and the second largest distribution center on the West Coast, ranking behind the Los Angeles/Long Beach area.

To make the point about the steamship, a carrier recently announced its intentions to shift its call from Portland to Vancouver, B.C. It is a competing foreign port and not a U.S. harbor. Based on new, larger vessels and vessels drawing deeper draft, Hanjin of Korea announced a few months ago that it was discontinuing service. That is why continuing the efforts and the funding for the channel deepening feasibility study is so important today.

I want to encourage the subcommittee to give the Corps the financial means necessary for a more proactive approach in its advance maintenance program. Rather than allowing channels to shoal to less than project depth before remedial dredging takes place, let's encourage the Corps to be more proactive.

I would suggest, Mr. Chairman, a clear statement from the Congress that the Corps's responsibility is to assure project depth and authorizing channels at all times would be a great step forward, and suggest that the Congress may want to pay more attention to those budget matters in appropriations in the years ahead.

Thank you. In the interests of time, our comments about the hopper fleet are contained in my written statement.

Thank you for this opportunity. We would say it is a pleasure to be here with both public and private, as well as trade, organizations all addressing the same common theme. Thank you very much.

[The statement of Mr. Thorne follows:]

TESTIMONY BY MIKE THORNE
EXECUTIVE DIRECTOR, PORT OF PORTLAND, OREGON
BEFORE THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE
OF THE HOUSE COMMITTEE ON APPROPRIATIONS
TUESDAY, FEBRUARY 27, 1996

Mr. Chairman and members of the committee:

Good morning, my name is Mike Thorne. As Executive Director of the Port of Portland in Portland, Oregon, I represent the seven lower Columbia River ports in Oregon and Washington that are sponsoring the Columbia River channel improvement project. I am honored to have the opportunity to discuss federal water policy with you.

Throughout the years, this subcommittee has shown strong support for our efforts to improve the Columbia River transportation system. Please accept my very sincere appreciation for that advocacy.

The seven deep-draft ports sponsoring the Columbia River Navigation Channel Deepening Project include, in Oregon, the Port of Portland, Port of Astoria, and Port of St. Helens; and in Washington, the Port of Kalama, Port of Longview, Port of Vancouver, and Port of Woodland. In 1995, more than 2,146 ocean-going ships carried 38 million tons of cargo valued at an estimated $14 billion through the private and public facilities located at these ports. Over the past 20 years, these cargo volumes have more than doubled on the lower Columbia River.

Request Summary

- My first job today is to support full funding of the Corps of Engineers' capability for the feasibility study of the channel deepening project. This appropriation will continue the federal government's share of the feasibility study to investigate deepening the channel from 40 feet to 43 feet. Local sponsors are matching the federal amount.
- My second point is the need to provide more support for the Corps of Engineers' responsibilities in the area of operation and maintenance dredging. Forecasts show that U.S. waterborne trade will rise from 875 million tons in 1990 to 1.5 billion tons by the year 2010. How U.S. ports can serve this volume will be determined, in part, by our own port planning and financing. It will be determined, too, in large measure by how much emphasis is placed on operation and maintenance funding for the Corps of Engineers. I know this panel supports that concept, but I worry that others in Congress and around the country don't always see the connection between our navigation channels and our competitiveness in world markets. As major shipping lines demand more in the way of service, U.S. ports will stand to lose ground in our ability to compete with foreign ports if our capital investments drop in harbors and navigation. The ultimate loser in this equation is not port management, but U.S. agriculture and manufacturers who will see their ambitions in world markets decline as cost-effective access to waterborne trade routes is lost.
- My third request is for this committee's continued strong support for the Corps of Engineers hopper dredge fleet. The critical value provided by these vessels in the Northwest is simple. Safety in navigation is due in large measure to the responsiveness of the Corps fleet to

rapid shoaling in our rivers and harbors. In addition, they assure competitiveness and cost savings by providing a check against the limited number of private bids that often are received in our part of the country.

- Finally, I want to say a word about the recent flooding in my home state. The Portland District of the Corps deserves our deep thanks for a job well done. Now we have to turn to the flood's aftermath. Shoals normally are created during floods, and they are likely to hamper navigation in the Columbia River. The Corps is working hard to survey any changes in the channel, particularly where shoaling is expected. I know they will strive to ensure the shipping channel is maintained at 40 feet for commercial traffic. My message to you today is that the Corps will need continued appropriations support in the wake of the flood. We may even be forced to call for specific assistance in a supplemental appropriations bill, if one is offered this spring.

You will also hear today from others in our region about their transportation needs and interests. In the Pacific Northwest, we are blessed with a growing and highly efficient transportation network that serves the needs of river ports, coastal ports, and the many shippers who are our customers.

Lower Columbia River Channel Deepening: Feasibility Study Funding

Let me expand on each request, beginning with the study of the channel project for the lower Columbia River. This project is the top marine priority for our region. Thanks to the help of this subcommittee, the reconnaissance phase of this investigation is complete, and we are one-third of the way through the feasibility study. Because of the delay in the budget this year, we do not know the amount the Corps will request for its full funding of the Fiscal Year 1997 federal share of the study. Nonetheless, I believe it is critical that the subcommittee provide the amount to be requested so that the feasibility study can continue on schedule.

At present, the feasibility study is scheduled to be completed in November of 1999. I must confess I wish we could find ways to speed up that process, but reality suggests to me that we will have to work hard just to keep it on schedule. The ports in the lower Columbia River already are seeing larger and deeper draft vessels call at our docks all the time. In fact, those large vessels that need a deeper channel are here in the Columbia River today. At present, the new, larger container ships calling in Portland and other Columbia River ports often must leave only partially loaded. This so called "light loading" means export cargo is left on the dock, and vessels are not used to maximum efficiency. Each foot of draft equates to 2,000 tons of cargo, which translates into approximately $324,000 in added wheat cargo value or $2.5 million in added container cargo value. That is the cargo left sitting on the dock when a ship leaves less than fully loaded. That is also lost business for the shipping line and U.S. manufacturers.

Here is what is at stake today. The Columbia River is the second largest export gateway on the West Coast. More than 90 percent of the region's goods move by way of the Columbia River to overseas customers. For the nation's wheat producers, the Columbia river is the largest export gateway in the U.S., handling approximately one-third of the country's production. From Montana, as one example, three-quarters of the wheat crop from that state reaches export markets by way of the Columbia River. Corn from the Dakotas and Nebraska rides the Columbia to the Pacific Rim. These are but a few examples.

In the container market, Portland has been one of the fastest growing container ports on the West Coast in recent years, although growth is leveling off. Given our nation's continuing trade deficit, this net contribution of exports from my region is a very positive factor in efforts to balance our trade deficit.

We expect our national trade significance to continue. Today, the Columbia River system can count many strengths. Our export volumes, coupled with effective steamship service to key markets, rank as critical assets. Also high on the list are our transportation and intermodal connections between our region and other parts of the nation. Finally, this transportation system and our docks and harbors are relatively uncongested, which means we can provide timely service in an age when just-in-time manufacturing is vital to our economic system. Nonetheless, the major weakness in our picture is the current 40-foot depth of our deep-draft navigation channel.

That is why building and maintaining a navigation channel that can handle today's larger vessels and those on order for the future is such a critical need. Nearly a decade ago, we began planning this navigation improvement with increasing vessel size in mind. Before we were able to bring the project on-line, reality already has caught up with us. Larger and larger vessels are calling at sponsor ports today. Their presence reminds us regularly of the critical need for this project to move ahead.

Graphic Evidence of the Threat

To make this point, one of our steamship carriers at Portland recently announced its intention to shift its vessel calls to Vancouver, B.C., in Canada--a competing foreign port, not another U.S. harbor. Based on its new larger class of vessels with deeper drafts, Hanjin of Korea announced the switch several months ago. A major reason cited was the concern over the depth of the Columbia River channel to handle their vessels. I must say that this is a sign of things to come if the present 40-foot channel is not deepened within the next several years.

What is not so evident in Hanjin's decision to switch its fleet to Vancouver, B.C., is the long-term impact of such a decision. The real risk is that such a change could begin to substitute Canadian products for products manufactured in the U.S. In the short term, one should not read too much into this specific departure because carriers often change their routes. What is important to note, if this trend were to become a long-term change in shipping patterns, is the threat to manufacturers and shippers who rely on the current Columbia River system. In short, the importance to move ahead with the channel project comes into very clear focus in the Hanjin departure. Here is clear evidence of why we need to move quickly to improve the Columbia River channel.

Benefits of a Well-Maintained, Integrated System: Operations and Maintenance

Our ports have a history of a 100-year partnership with the federal government in operating and maintaining the Columbia River's navigation system. In 1890, the Portland District of the Corps of Engineers completed a study defining a 25-foot-deep channel from Astoria to the Portland/Vancouver area. A year later in 1891, the Oregon legislature created the Port of Portland for the sole purpose of dredging this 25-foot channel. Completion of the project came in 1893. Over the years, this federal/local partnership has seen the successful authorization and construction of two more channel improvements: deepening to 35 feet, completed in 1950; and construction of the existing 40-foot channel, dedicated in 1973.

The main Columbia River navigation channel is one part of a total system. While the main channel serves as the gateway to accommodate large ocean-going vessels, we should never forget the importance of the lock and dam system that opens up the river to its inland waterway stretching to Idaho. That this system exists, and is being improved today, is testament to the wisdom and foresight of this subcommittee and Congress.

Our challenge today comes in the face of the transition within the federal government, particularly with the Corps of Engineers. Faced with a wide range of fiscal priorities and restraints, the Corps of Engineers is being pulled in a number of directions. The hydro system has demands, flood control is a pressing need, recreation and environmental demands are great. The Corps finds it hard to prioritize these demands. Congress needs to move expeditiously to be sure that the Civil Works Department within the Corps of Engineers has adequate resources to assure the upkeep and maintenance of the harbor and navigation system.

Our maintenance of the nation's navigation system directly affects our access to outside markets. If we can't keep our waterways functioning at all times at project depth, our manufacturers and producers will suffer serious economic impacts. Ports understand these connections, and this subcommittee understands these connections. But the fact is, not everybody around the country understands how a productive gateway to trade helps us compete in the global economy.

Advance Maintenance Encouraged

I encourage this subcommittee to give the Corps of Engineers the means to take a more proactive approach in its advance maintenance program. Rather than allowing channels to shoal to less than project depth before beginning remedial dredging, let's encourage the Corps to be more proactive. A clear statement from Congress that the Corps' responsibility is to assure project depth in authorized channels at all times would be a great step forward. Unless our waterway system is equipped at all times to meet the demands of the 21st century, we are not going to keep up our record of improved competitiveness in the world marketplace.

Strong growth in U.S. foreign trade in recent years, coupled with innovations by shipping lines, has produced an even more competitive environment in the maritime industry. U.S. ports operate in a complex legal framework that has placed considerable financial pressure on port operations and expansion. Our overseas competitors do not face these same restraints. I am not here today to argue that we undo the proliferation of environmental rules and regulations facing U.S. ports. What I am here to say, as forcefully as I can, is that Congress needs to pay even more attention to the Corps of Engineers operation and maintenance budget in the years ahead.

To continue the growth of exports and U.S. productivity we have seen in recent years, Congress will need to encourage intelligent investment and management in the existing harbor and channel facilities that serve our nation's shippers and manufacturers. Certainly, Congress should also take care to ensure that any wasteful missions for the Corps of Engineers are eliminated. It would be ironic, however, if the Corps of Engineers were to lose sight of its navigation mission just at the time U.S. manufacturers are reaching their stride in international competition.

Ports will move aggressively to meet the demands of their shipper customers in our own planning and financing of port facilities, such as docks, wharves, and terminals. Our success in international competition also will be determined in large measure by the role played by the Corps of Engineers.

I know this subcommittee supports that Corps' mission. Yet the challenge will be to make sure that the process of careful budgetary examination does not dismantle existing programs that deliver great economic good. I encourage the members of this subcommittee to use their skills and courage to help keep the navigation focus of the Corps of Engineers at a high level. Now, more than ever, is a time to deliver an effective navigation system for our nation's manufacturers.

Hopper Dredges: Critical to Safe Navigation

All of us who stand to benefit from deepening the Columbia River channel also owe a critical debt to the Corps of Engineers hopper dredge fleet. This group of four specialized dredges provides an essential margin of safety in navigation for the nation's rivers and channels. Threats to navigation come in the form of shoaling and sand waves in the Columbia River as well as other navigation systems around the country. If ignored, these difficulties curtail or stop navigation, or worse, create dangerous hazards to vessels. While these problems do not always require a large amount of work, they do require very quick response. If the Corps dredges serving my region were ever removed, our ability to respond promptly and effectively to these challenges or safety hazards would be greatly diminished. The result is delayed cargo and lost export opportunities or much worse--all of which hurts shippers.

Cost also is an important consideration in the continuation of the Corps hopper dredge fleet. I am a strong supporter of the private sector. Yet I must confess in this instance, the presence of the government fleet helps keep bids for dredging work competitive and lower in cost. Private dredging capacity, particularly in the Pacific Northwest, is very limited. The result has been a less than satisfactory competitive bidding situation. In this case, the Corps fleet does provide a competitive damper on prices. The overall result is that the Corps operations and maintenance budget can be stretched farther.

Complicating this policy is the Congressional debate that comes up each year over how to divide work between the Corps fleet and the private sector dredges. On behalf of our port group, let me assure you we are interested in the least costly option for dredging. Yet, I must say, based on the Corps' own experience in the Pacific Northwest with the general lack of competition for bids, having a robust and fully active Corps fleet is very important in this equation. My region firmly believes that Congress should refrain from any further limitations on the Corps hopper dredge fleet in appropriation bills or any other legislation.

Conclusion

Again, Mr. Chairman, the lower Columbia River ports point to our navigation channel as a remarkable success story as a partnership between federal, state, and local governments and our private sector customers. Ours is a story of regional and national trade significance that is at a critical crossroads in economic and strategic importance. As the world's fleet increasingly shifts to larger vessels, shipowners will continue to ask me and my colleagues harder questions about when the Columbia River will eventually be deepened.

Now is the time to make a clear statement about the importance of the Columbia River system, on several different fronts. Your subcommittee can do so by signaling its support for a continuation of the feasibility study, for a continuing high priority for operations and maintenance dredging, and for a continuing strong presence of the Corps hopper dredge fleet.

This subcommittee has a tremendous opportunity to help keep our trade productivity on a prosperous pathway. To do so, however, you must help keep the Corps of Engineers on its toes. I look forward to working with you on this challenge in the years ahead.

Again, thank you.

Mr. LEAVITT. Mr. Chairman and members, I am Keith Leavitt, Ports Division Manager, State of Oregon Economic Development Department. I am here to represent the State and the governor in support of the fiscal year 1997 energy and water bill that contains the Corps' budget.

I would echo what my colleagues have said. I would like to talk about three basic things. One is the importance of dredging to our State. Two is the ongoing navigation projects in which our State is an active funding partner on those projects. And three is to touch on the hopper dredge fleet issue.

In Oregon we have two types of ports. One is on the Oregon coast, which are smaller fishing ports. They have dredging needs that are very critical for their fishing fleet to be able to have access to the ocean; and public safety, as well as having that access, is a very important issue for our coastal fishermen and women, and those ports have a definite need in that area.

We would ask this committee to do—what happened last year, the Corps came forward with a proposal that would do away with small-port dredging. This committee said no to that idea, and we join you in saying no to that idea this year.

The other type of dredging is on the Columbia River and that is for a very significant trade. Our economy depends on being able to compete effectively in the global economy. It is very critical that we have the continued operation and maintenance dredging for those reasons as well.

In Oregon we have what is called the Marine Navigation Improvement Fund. It allows the State to not only commit in policy to these issues but also to put funds on these issues as well. We are the non-Federal sponsor. We join with the Washington-Oregon ports as a non-Federal sponsor on the channel deepening project. That is one of the number one priorities for the State of Oregon for our economic future.

Two, the Coos Bay channel deepening project, that project was authorized last year. We will be ready to move to construction in May. The Corps has only allocated partial amounts of funding in order to finish that project. The State has put forward their full non-Federal cost share. We have asked the Corps, and continue to work with them in their fiscal year 1996 budget, to reprogram those funds to be able to finish out the Federal cost share. To the extent that they are not successful in doing that, we ask that the fiscal year 1997 budget help finish out that cost share. In the meantime, the State funds really serve to finance the Federal share, and that is a little bit of a risky position for those funds. So we ask for a continued commitment on that project.

The Newport Breakwater is the third navigation project going on in Oregon. The feasibility study is almost done. It is for a breakwater that was built in the 1940s that needs to be renovated and extended. The State has put forth $300,000 in the cost share on that feasibility study and have the funds available to move forward to construction. We ask your support in the fiscal year 1997 budget in order to move forward on construction on that breakwater. It projects a very significant West Coast fishing fleet out of the Port of Newport.

The Corps of Engineers minimum hopper dredge fleet, we have been here on that issue before, and we have significant dredging needs in our State. We have high need for emergency response, and the public safety aspect of that issue is one thing that we continue to see in getting very good service from the Corps of Engineers, including the floods that just took place a few weeks ago in our State. We ask your continued support for the Corps of Engineers' hopper dredges.

Mr. Chairman, that concludes my comments. I went to a port meeting last Friday. They wanted to make sure we said thank you to you and Congressman Bevill for your continued service throughout the years. Your efforts are felt in the Northwest. Thank you.

[The statement of Mr. Leavitt follows:]

Oregon
ECONOMIC
DEVELOPMENT
DEPARTMENT

Testimony of

KEITH LEAVITT
Oregon Economic Development Department
Representing

THE STATE OF OREGON

House Appropriations Subcommittee on Energy and Water
February 27, 1996

Mr. Chairman and members of the subcommittee, I am Keith Leavitt, Ports Division Manager for the Oregon Economic Development Department. I appreciate the opportunity to testify on behalf of the State of Oregon about the proposed fiscal year 1997 budget for the United States Army Corps of Engineers. My testimony today discusses several aspects of Corps activities, including the:

--importance of dredging to our state's economy;
--proposed Columbia River Channel Deepening project;
--proposed Coos Bay Channel Deepening project;
--importance to Oregon ports of maintaining the Corps of Engineers Hopper Dredge Fleet;
--restoration and improvement of the Newport breakwater;
--our support for the Corps of Engineers Operations and Maintenance budget

Few places in this country review the budget and policies of the Corps of Engineers as carefully as in Oregon: by our Congressional delegation, state officials and legislators, mayors, county and port commissioners, and community business leaders. Much of our state's economy revolves around a functioning and prosperous coastal and river ports system.

PORTS AND WATERWAYS CREATE JOBS THROUGH EXPORTS

The Columbia/Snake River transportation system serves as a vital river highway which reaches far beyond its shores--to Montana, to the Dakotas--and well into the American mid-west. Oregon is working to diversify its exports, adding new products to the mix at each opportunity. Facilitating trade through our federal river system is an essential component of the Northwest regional economy.

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Governor John A. Kitzhaber
The department is an AA/EEO employer, [illegible]

A Corps of Engineers budget which fails to address the pressing needs of our ports and waterways will impact the competitiveness of American exports in global markets. For the Pacific Northwest, those markets tend to be Asian along the Pacific Rim; but they are also markets in Europe, Latin America, the Middle East and Africa for exports moving via river commerce and ports elsewhere in the U.S. The Corps budget should be viewed in this broader transportation and competitiveness context.

At the same time, the Corps mission addressing increased environmental protection also is one of great interest to us. I encourage this subcommittee to act to ensure that Corps funding for FY 97 reflects a commitment to high standards for environmental protection.

IMPORTANCE OF DREDGING

At a time when this country must compete effectively in the global economy, we want Columbia River imports and exports to grow and diversify. But if deeper draft vessels cannot call at Washington and Oregon ports, or if vessels must depart less-than fully loaded to avoid drawing as much water, then per unit transportation costs increase for that cargo. As a result, these American products are less competitive.

Dredging ensures that U.S. cargo moves into international commerce via an efficient harbor and river transportation system. River transportation is the most fuel-efficient and least environmentally damaging mode by which cargo moves in this country. Our channels must be kept open so that trade will increase and American jobs are created and sustained.

Because the President and Congress both have signaled their interest in promoting U.S. exports, keeping navigation projects such as those for the Columbia River and Coos Bay moving as quickly as possible through the review and construction process is a way to help us expand trade. The sooner these channels are deepened, the quicker we can see our exports climb--and our trade deficit fall.

COLUMBIA RIVER CHANNEL DEEPENING STUDY

The importance of the Columbia River to the Northwest economy cannot be overstated: a third of United States exported wheat moves down the Columbia River, forming the fourth largest bulk export system in the country. In 1994, some $13 billion in commodities moved on the Lower Columbia River's deep draft channel.

We view the proposed channel deepening project as an important piece to our region's economic future. The feasibility study formally began on July 1, 1994, and is scheduled through 1999. We believe the study will show that the project has clear economic benefit while meeting high standards for environmental protection. Prompt but thorough action on the feasibility study is needed. We hope Congress will ensure that adequate funds are provided, and that the Corps will have the tools to move this study through the environmental and economic review process as expeditiously as possible.

COOS BAY CHANNEL

The Coos Bay Channel Deepening project began in 1983 and has undergone a very expensive and exhaustive environmental study and review process lasting nearly eleven years. This project will allow larger ships to call at the Oregon International Port of Coos Bay and make that southern Oregon Coast community a more competitive Pacific Rim port. We are happy to report that in 1994, the final feasibility report was complete, and this project was finally ready to begin construction. The State of Oregon committed $3.6 million to fulfill the non-federal cost share for this project.

The new channel depth of 37 feet received congressional authorization when President Clinton signed the Fiscal Year 1996 Energy & Water Appropriations Bill. Construction is scheduled to begin in May of this year. Much to our dismay, however, the Corps has allocated only partial FY 1996 funds to fulfill their cost share. In order to move the project forward, the State of Oregon must agree to finance part of the federal share upon the assumption that remaining federal funds are appropriated when available. We have asked that the Corps make every effort to re-program FY 1996 funds to this project. We also urge this subcommittee to appropriate the FY 1997 funds necessary to honor the federal commitment. To do otherwise would not only jeopardize this important project, but would also leave the local sponsor (State of Oregon) exposed to significant lost investment.

CORPS HOPPER DREDGE FLEET

The four remaining Corps hopper dredges serve a key role in dredging around the country. Two out of the four are located in the Northwest. The *Yaquina* and *Essayons* dredges are owned and operated by the federal government and have responded exceptionally well to dredging needs that crop up with alarming regularity in our region. Whether it is volcanic eruptions, floods, or the usual high maintenance needs of northwest channels and harbors, emergency response as well as routine channel maintenance by the Army Corps of Engineers dredges has been first-rate.

Not only are the Corps dredges needed for public safety through emergency response, but they also provide competition in the contract bidding process. While a significant amount of dredging work is contracted out to the private sector, we believe that without the public fleet, the cost of dredging would skyrocket due to lack of private sector competition. Without the Corps dredges we fear that this lack of competition would hold Northwest ports captive for adequate dredging service.

We urge the subcommittee to defer any change in funding for the Corps dredges until completion of a Corps study examining the future role for the Corps dredge fleet. At that time, we will evaluate the study to see how it addresses the three principles important to regions of the country served by the Corps dredge fleet. These principles are: emergency responsiveness, competition/cost, and capacity.

NEWPORT BREAKWATER

The Newport breakwater was built in the mid-1940's and serves to protect the inner harbor. It has allowed the port to grow to be home to a significant commercial fishing fleet. The breakwater, nearly 50 years old, now needs major repair and extension. Carrying out this project will mean better protection for those vessels using the inner harbor, and will allow for continued growth of this important West Coast fishing port.

This is a project of high priority for the State of Oregon as we have already contributed $297,500 to the feasibility study which is almost complete. Additionally, the State has secured the non-federal match needed for the construction phase. We urge this subcommittee to join us in that commitment and appropriate the needed funds to move this project forward.

FULL FUNDING FOR CORPS OPERATIONS AND MAINTENANCE WORK

Operations & Maintenance work is critical to America's water infrastructure. Without adequate funding for maintenance dredging, the economic impact to Oregon's coastal and Columbia River ports would be devastating. We are closely monitoring the various policy issues sent forward by the Corps last year. I urge this panel to provide sufficient Corps funding in the Operation & Maintenance account to see that America's ports and rivers are dredged as needed in FY 97. Plans to terminate Corps dredging of smaller ports would have a severe impact in many smaller Oregon coastal communities. We encourage this subcommittee to once again reject this Corps initiative.

PORTS ARE CRITICAL TO U.S. INFRASTRUCTURE

As members of this subcommittee, you know very well that ports are an integral link in the U.S. transportation system. Low cost water transportation is an important ingredient in keeping U.S. products competitive in world markets.

Funds to upgrade the U.S. highway network should be spent with an understanding that an inefficient port system can create a bottleneck to moving goods into export markets. We must make sure that an efficient transportation system includes the key intermodal transfer points through ports. We want the advantage in cost competitiveness provided when our waterways and ports all operate at the same efficiencies as do our highways, rail and ocean carriage of goods.

CONCLUSION

Balancing spending priorities in a time of shrinking resources is a difficult task. I urge you to reallocate funds to allow U.S. ports and waterways to continue to support local communities and competitively position our country in the global economy.

In closing, I want to thank Chairman Meyers and all subcommittee members for their attention and understanding of the various issues I have discussed here today. Your decisions heavily impact the State of Oregon.

Thank you for the opportunity to address this subcommittee.

PORT OF TOLEDO
625 NW Bay Blvd
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Jack K. Barbour, Commissioner
Steve W. Barnes, Commissioner
Margaret J. Brunette, Commissioner
Pat Kaiser, Commissioner
Stu Strom, Commissioner
Penny Mendenhall, Port Manager

Written Statement

Penny Mendenhall-Ryerson, Port Manager, Port of Toledo, Oregon
and
Member of Oregon Coastal Ports Maintenance Dredging Committee
Oregon Coastal Zone Management Association

before the

Senate Appropriations Subcommittee on Energy and Water Development
and the
House Appropriations Subcommittee on Energy and Water Development Subcommittee
on March 5, 1996

The Port of Toledo commission and Port Manager would like to take this opportunity to thank the subcommittee for the appropriation of funds for the partial dredging of Depot Slough in 1995 The commission and Port Manager are appreciative for the 1996 funding for the continuous dredging of Depot Slough and Yaquina River. The port is moving forward and with your help it is making it possible for the port to do its part in our continued effort to enhance the development of our community Due to the shortfall of funds in the 1995 Corp budget, the port had to prioritize what area of Depot Slough was to be dredged The port was under the impression that the $500,000 allocated in the 1996 Corp budget was to complete the Depot Slough project. Without the allocation from Congress to continue and complete the dredging project it will decrease the possibility of enhancing the economic growth of our depressed area

Oregon ports have voice concerns on the importance of maintenance dredging for the Coastal ports as well as for the Columbia River. The Port of Toledo continues to support the federal operations and maintenance dredging program for Oregon Ports A continued O & M program ensures further economic growth of the coastal communities. Ports value the subcommittee's on going commitment to enhance local economies. Ports applaud and support the FY 96 approval for the U S Army Corp of Engineers (COE) Operation and Maintenance Programs However, any corps service restrictions due to budget reductions below the proposed budget will seriously affect the navigability of our ports. A prime example of the need is the 1996 floods of the State of Oregon. Small ports have had erosion of our banks and silting in our rivers It is imperative that the dredging fleet stays in the Northwest

The Oregon ports would like to voice our strong support for the continued Corps of Engineers dredges used in the Pacific Northwest "Yaquina" and "Essayons" These vessels are crucial to maintaining navigation of our coastal ports' channels and harbors We commend the Port District Corps of Engineers staff for their flexible scheduling of those dredges Their ability to perform our regular dredging and still maintain instant response to emergency situations is essential There simply is no other capability than can provide this vital service with timely emergency response and still remain cost effective. We are out of business without this type of service

Last year Dr Zirschky stated that the Corps "Will discontinue Federal maintenance of harbors that do not generate significant commercial navigation activity and, therefore, do not produce contributions to the Harbor Maintenance Trust Fund " Investigations made by an Association, sponsored 1991 studies (Strategies for Responding to Reduced Federal Funding of Annual Maintenance Dredging) showed that Oregon's ports have high commercial navigation activity and waterborne commerce value, but it is from commercial fishing activities with lower amounts of tonnage Therefore, contributions to the Trust Fund from Oregon ports do not adequately reflect the need for maintenance dredging

Smaller ports, however, are concerned with the possibility of discontinued dredging because they do not pay into the Harbor Maintenance Trust Fund Small ports such as the Port of Toledo are unable to accommodate large import and export vessels Although small ports can contribute to our communities by creating new businesses, strengthening the family unit, putting displaced workers back into the work force with family wage jobs This is possible by dredging of smaller ports and keeping our channels open

Ports specifically express our united strong support for the continuance of the Corps of Engineers Continuing Authorities Program This program has been a vital factor in accomplishing a variety of small projects needed in all ports, especially through Section 14, Section 103, Section 107 and Section 111 of the River and Harbor Act and Section 1135 of the Water Resources Development Act These programs need to be realized to continue the planning and technical assistance need for our ports, waterway and navigational improvements There have been many worthwhile projects from these sections along the Oregon Coast, recent examples being the protection of the Winchester Bay West Spit Shoreline and the Port of Newport Breakwater Repair Shoreline protection requires ongoing maintenance to prevent catastrophic failure of our system of navigable waterways.

The devastation from the 1996 Flood in the State of Oregon has created more problems with the need for more dredging

The Oregon Coastal Ports Maintenance Dredging Committee, comprise of all fourteen (14) coastal ports, continue to meet We are submitting to you the latest update to the Committee's publication "Navigation and Other Activities on Coastal Waterways and Harbors in Oregon and the Columbia River." This cooperative effort has resulted in a unified stand on Federal and State proposals impacting our port operations. Our thanks to Senator Mark Hatfield for urging this approach in order for us to accomplish our goals and enhance our economic growth.

Ports again extend our sincere appreciation for this Committee's careful examination of our budget request for Federal funding that allows the coastal ports of Oregon to realize the benefits that accrue as a result of earlier channel and jetty improvement projects approved by this

Committee. We firmly believe that the current system Congress uses to examine and to fund these coastal projects is working well and should be continued in the future.

Mr. SALSGIVER. Mr. Chairman, Chairman Bevill, for the record, I am Mike Salsgiver, Government Affairs Manager for the Intel Corporation in Oregon. We appreciate the opportunity to join our colleagues here in a show of support for a government private-public partnership in support of the Corps' projects this year.

High tech was targeted in the late 1970s by the State of Oregon as a key industry in the State's efforts to diversify its natural resource-based economy, and Intel has now risen over the years to be the world's largest microprocessor chip manufacturer and a leading manufacturer of personal computer networking and communications projects.

Intel Oregon is the largest Intel site in the world, and is Oregon's largest private industrial employer now. Since first locating in Oregon in 1976 we have grown to become a six-campus complex which is home to more than 8,500 employees and growing every day. We are adding about 100 a week. We had a payroll in 1995 of over $500 million in Oregon alone.

Over the next 10 years Intel will invest over $2 billion at our new research and development facility in Hillsboro, Oregon, just west of Portland. So our commitment to the State of Oregon is strong and growing, and a major factor in ensuring Intel's commitment to the Pacific Northwest is the region's efficient and integrated transportation system. An important factor in leading Intel to expand in Oregon was the system's ability to move our products rapidly to and from the marketplace.

The time that is needed to reach customers that we serve is an essential element in our planning today. Success in transportation means that there must be a range of options and there must be flexibility to meet multiple schedules and needs.

The recent floods Mr. Leavitt alluded to are an example of that. We had to have a well-integrated, efficient intermodal transportation system to accommodate our needs, and those were met quite well. We are focused on how best to serve our customers and how to control our shipping costs, and the basic system that is in place is vital to that.

The successful operation of the Columbia River navigation system is essential to our continued success in the Pacific Northwest region in international trade. It is a very competitive marketplace. We have to fight each and every day to stay ahead. Therefore, the project to deepen the Columbia River channel is central to our future there. This project is the top marine priority.

Intel sincerely appreciates your vision and your hard work over the years in ensuring the viability of this system and ensuring the funding for the Corps' share of the feasibility study so far. It represents an excellent example of public and private partnership, and we strongly support the Corps' budget request for the feasibility study in fiscal year 1997.

Thank you very much for letting us appear with you today, and thank you both again for your long and dedicated service over the years. You have been crucial to our region.

[The statement of Mr. Salsgiver follows:]

Intel Corporation
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TESTIMONY OF MICHAEL K. SALSGIVER
OREGON GOVERNMENT AFFAIRS MANAGER, INTEL CORPORATION
FY 1997 COLUMBIA RIVER CHANNEL/CORPS OF ENGINEERS BUDGET BEFORE THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE OF THE HOUSE APPROPRIATIONS COMMITTEE
TUESDAY, FEBRUARY 27, 1996
WASHINGTON, D.C.

Mr. Chairman, Members of the Subcommittee:

For the record, my name is Michael K. Salsgiver, and I serve as the government affairs manager for Intel at its Oregon site in Hillsboro, Oregon, outside of Portland. Please accept my sincere appreciation, on behalf of Intel, for this opportunity to express our strong support for a variety of water resource issues affecting the Pacific Northwest.

Intel is the world's largest microprocessor chip manufacturer and a leading manufacturer of personal computer networking and communications products. Intel Oregon is the largest Intel site in the world and is Oregon's largest private industrial employer. Since first locating in Oregon in 1976, Intel Oregon has grown to become a six-campus complex which is home to more than 8,500 employees with a payroll of more than $500 million. Over the next 10 years, Intel will be investing more than $2 billion at our new Ronler Acres research and development facility in Hillsboro.

As you can see, Intel's commitment to Oregon is strong and growing. A major factor in ensuring Intel's commitment to the Pacific Northwest is the region's efficient, well-integrated transportation system. An important factor in leading Intel to expand in Oregon was this transportation system's ability to move our products rapidly and cost effectively to and from the marketplace. One of the real strengths of this region is the transportation infrastructure and its lack of congestion.

That uncrowded system, coupled with intermodal connections north and south as well as east out of Portland, helps Intel maintain its leadership in the intensely competitive global marketplace we face.

Let me turn to the importance of the Columbia River navigation system. For Intel, this effective freight mobility system is more than a local gateway to trade. It is a national transportation asset that will help keep us and other manufacturers in our region competitive into the 21st century. In fact, it is one of the keys for success in our future shipping plans. We line up the markets we serve, both export and import, with the range of transportation options offered. And finally, we carefully consider the time needed to reach the customers we serve, an essential element in our planning today. Success in transportation means a range of options and flexibility to meet multiple schedules and needs. We are constantly focused on how best to serve our customers and how to control our shipping costs.

It is very clear that the successful operation of the Columbia River navigation system is essential to the continued success of our region in international trade. Therefore, the project to deepen the Columbia River channel is central to the future. Local, state, and regional leaders in the political and business worlds are joining together to support this important dredging project. It is worth noting, that for Intel, this is a community issue as well as a bottom line issue.

Mr. Chairman, you and your colleagues are to be commended for your foresighted support of this project to date. Your strong support for funding requests for the feasibility study, to date, are greatly appreciated. The channel project is the top marine priority for our region into the next century, and I want to assure you that Intel sincerely appreciates the funding for the Corps' share of the feasibility study thus far. This represents a very good example of governmental and private partnership, working for a regional and national interest. We strongly support funding the Corps' budget request for the Columbia River feasibility study in Fiscal Year 1997.

Although my comments focus on the channel improvement project, maintenance of the Columbia River channel and others around the country should remain a priority for the nation. The U.S. Army of Corps of Engineers, as trustee of our nation's navigation system, must have the tools to be an effective manager of our harbors and channels throughout the country. I encourage committee members not to lose sight of this important investment as you wrestle with the challenges facing you in the budget.

Let me close by saying I am pleased to be a part of the panel of witnesses you are hearing from today. As a representative of the private sector, I strongly encourage this subcommittee to act favorably in support of the funding request for the feasibility study and for continued support for the Corps operation and maintenance budget in the future.

Thank you for this opportunity to express the views of Intel on these important water resource matters.

Mr. BUNN. I just want to thank the witnesses for sharing with us. I am optimistic that as we do set priorities, we can accomplish the things that we need to. Again, thank you for taking the time to share.

TUESDAY, FEBRUARY 27, 1996.

MOBILE HARBOR

WITNESSES

JOHN P. CAREY, MANAGER, ADMINISTRATION, ALABAMA STATE DOCKS DEPARTMENT

Mr. MYERS. Mr. Bevill, for the next two delegations.

Mr. BEVILL. Mr. Chairman, we have my good friend, John Carey, here from Mobile, Alabama. He is the Manager of the Administrative Services at Alabama State Docks.

We are pleased to have you with us.

I am going to ask Charles Swann, the City Administrator of Northport, Alabama, to come forward.

So the Chair will recognize you, John. You may proceed as you wish. You have five minutes allocated. Your prepared statement will be made a part of the record.

Mr. CAREY. I am accompanied by E.G. Browning, who is the Chief Operating Officer for the Alabama State Docks; and Dean Kelly, Vice Chairman of Maritime Affairs for the Mobile Chamber of Commerce.

Mr. BEVILL. Glad to have you go with us.

Mr. CAREY. About 5 years ago, when I first joined the Alabama State Docks, we had just completed the deepening of the Bay Channel, Mobile Bay Channel to 45 foot. This was critical to the Alabama State Docks and the Port of Mobile in that the Alabama State Docks, a State agency, which is revenue based, in other words, not tax-supported, is the local sponsor for the Federal project in Mobile Harbor and in other areas within Mobile or in lower Alabama.

After a very slow start, that investment has now begun to pay off. In fiscal year 1995, the Alabama State Docks experienced an increase of 30 percent in its operating volumes. It is also at an all-time high in revenues.

As a result of these success stories, in fiscal year 1996, the Alabama State Docks is undergoing a $75 million increase in new and rehabilitated infrastructure to support our operations.

In addition to that, last Thursday, Governor James, announced the signing of a contract with an international firm which will locate a $100 million direct-reduction iron plant on Alabama State Docks property. This DRI plant will be serving two steel plants located in northern Alabama.

With that in mind, I want to talk with just three particular points this morning: First of all, operation and maintenance costs of the Mobile Harbor Federal Project in 1991, were approximately $22 million. Through close cooperation with the Corps of Engineers we have been able to reduce those maintenance costs to approximately $1.5 million on an annual basis over the 5 years. We recognize that there are a few other things which can be done in Mobile Harbor to further reduce those costs and we will be coming to various congressional committees to assist us in those particular areas base.

Based upon that $17.5 million steady State cost, we requested in this year's fiscal budget that we once again be allocated, or the Corps of Engineers be allocated the same steady State level of funding for Mobile Bay. Obviously, this assumes we will not experience the catastrophic events that other areas in Alabama experienced last year with the hurricane.

Secondly, as has already been alluded to a number of times in today's testimony, the Port of Mobile is the terminus of about 1,500 miles of inland waterway systems that serve the State of Alabama. Six different inland waterway systems come into the State of Alabama and provide tonnage both for import and export through the Port of Mobile. As such, the Port of Mobile supports the testimony of those waterway systems serving the port and also requests steady State funding for them also.

Lastly, the Port of Mobile recognizes that future operations of maintenance and dredging for the Mobile Harbor Project and the inland waterway systems in Alabama is contingent upon continuing research and development activities conducted by the waterways experiment station of the U.S. Army Corps of Engineers. We strongly encourage full funding of the WES Dredging Operation and Environmental Research Program.

Lastly, in our recognition of the retirement of Mr. Bevill and also Mr. Myers, the Alabama family is holding a reception this afternoon at 5:30 in B-369. We know that we have invited Chairman Myers and Mr. Bevill, we would like to extend that invitation also to this committee's other Members and to the committee's staff. We look forward to seeing you later this evening.

Mr. BEVILL. Are you going to say something good about us?

Mr. CAREY. I don't know how I could say anything more than has already been said, sir.

Mr. BEVILL. We will be sure to be there, then.

Mr. CAREY. Look forward to it.

Mr. BEVILL. Thank you very much for a fine presentation.

[The statement of Mr. Carey follows:]

STATEMENT OF

JOHN P. CAREY

MANAGER, ADMINISTRATION

ALABAMA STATE DOCKS DEPARTMENT

OF BEHALF OF

OPERATING AND MAINTENANCE FUNDING

MOBILE HARBOR

FISCAL YEAR 1997

BEFORE

THE UNITED STATES HOUSE OF REPRESENTATIVES

SUBCOMMITTEE ON APPROPRIATIONS

FOR

ENERGY AND WATER DEVELOPMENT

HONORABLE JOHN MYERS, CHAIRMAN

WASHINGTON, D .C., FEBRUARY 27, 1996

SYNOPSIS

The Water Resources Development Act of 1986 authorized the deepening of the main channel serving the Port of Mobile from 40 to 45 feet. The construction work was completed in 1990.

Operations and maintenance costs of the Mobile Harbor federal project in 1991 were approximately twenty-two million dollars ($22,000,000). Recent costs indicate that these maintenance costs have stabilized at about seventeen and one-half million dollars ($17,500,000). It is the desire of the Port of Mobile to obtain a steady state level of federal funding for Fiscal Year '97. It is felt that this will be sufficient, assuming that no catastrophic event impacts the Mobile Bay.

The Port of Mobile is the terminus of approximately fifteen hundred miles of inland waterway systems serving the State of Alabama. This includes the Tennessee Tombigbee System. As such, the Port of Mobile supports testimony of the waterway systems serving the Port and requests steady state funding for them also.

The Port of Mobile recognizes that future operation and maintenance dredging for the Mobile Harbor Project and the inland waterway system in Alabama is contingent upon continuing research and development activities by the Waterway Experiment Station (WES) of the U.S. Army Corps of Engineers (COE). Therefore, we strongly encourage full funding of WES dredging operation and environmental research programs.

Mr. Chairman:

I am John Carey, Manager of Administration for the Alabama State Docks, the local sponsor for the Mobile Harbor Federal Project. I am pleased to appear before the Committee once again to highlight the successes of the Port of Mobile as a result of the strong partnership which exists between this Committee, the State of Alabama and the U.S. Army Corps of Engineers in the funding and execution of this vital element of the National Transportation System.

In the Water Resources Development Act of 1986, authorization was given to deepen the Mobile Bay channel from 40 to 45'. In the six years since this construction effort has been completed, the Port of Mobile and as a result, the economy of the State of Alabama, has experienced a significant and steady increase in international trade The Port of Mobile, from all aspects, is the epitome of the concept of intermodalism. We are served by two major interstate highway systems (I-10 and I-65) We have four major railroads which service the Port (BN, CSX, IC and NS) The Port is the terminus of approximately 1500 miles of Alabama inland waterway systems. Through the access provided by the Tennessee Tombigbee Waterway and the Gulf Intercoastal Waterway we participate significantly in interstate commerce originating throughout the states adjacent to the coast of the Gulf of Mexico, well into the upper reaches of the Ohio River Waterway System and across the territory served by the entire Mississippi River and Tributaries System.

As has been demonstrated by the droughts and flooding experience in the heartland of the United States in recent years, we provide the only alternative to waterway transportation during such events. Over the last several years and through the very supportive efforts of the Mobile District of the U. S. Army Corps of Engineers, the reliability of the Port of Mobile has increased significantly. As a result, each year the Port of Mobile is experiencing an ever increasing volume of international commerce. In fiscal year 1995 the increases were dramatic and set record volumes for the Port.

The Alabama State Docks is a state agency and the largest operator in the Port of Mobile. We are revenue based and receive no state tax funding. Our infrastructure base handles approximately 50% of the tonnage which passes through the Port of Mobile. Therefore, I feel it appropriate to rely upon the results of the Alabama State Docks fiscal year '95 figures to describe the dynamics resulting from the dependability of the newly deepened and well maintained channel. Our infrastructure is valued at in excess of one-half billion dollars. We currently have a construction program which will expand this infrastructure by over $75 million in the next 12 months. In addition, we are well into a multi-national project which will result in the construction of a one hundred million dollar Direct Reduced Iron (DRI) plant within the Port confines. The product produced at this plant will be transported via our inland waterway systems to two sites in the interior of the State of Alabama where in turn it will be used in the expansion of our state steel making capability. These two sites, to be constructed at a cost of almost $300 million, in turn will feed our growing export of steel products.

In fiscal year of '95, the Alabama State Docks experienced an increase of 30% in its tonnage over last fiscal year. Our operating revenues increased to almost $59 million, up approximately 20% from the previous fiscal year. We are multi-commodity port and experienced across the board increases in each of the general commodity areas. For example, general cargo was up by 9%. This includes such commodities as forest products. The Port of Mobile is proud to claim title that it handles more wood pulp than any other port in the United States. Other general cargo items such as iron, steel and other metals were up 177% over the preceding year. We saw an increase in the number of ships, barges, trucks and rail cars in the fiscal year '95. Our public grain elevator has made a significant turn around as a result of a decision to focus on nitch grains. Last year was the best financial year for the public grain elevator in almost a decade.

The ASD Bulk Material Handling Plant registered a 27% increase in tonnage. It handled iron ore, foreign and domestic coal, ilmenite and petroleum coke. In addition, for the first time in over a decade, bauxite moved through our facilities. We also are seeing a renewed interest in imported furnace coke.

Lastly, coal continues to reign as the leading cargo moving through ASD with an impressive increase of 32%. Our terminal is the largest bulk coal handling facility on the U.S. Gulf and the second largest in the nation. It is the only facility in the US that can accommodate both rail and barge traffic. This facility is currently undergoing a major improvement in our ability to export coal, but also the newly established mission in the importation of coal to support clean power generation efforts in neighboring states. Full funding of the operations and maintenance budget of the Mobile District of U. S. Army Corps of Engineers for the Mobile Harbor Project is critical to the continuation of our success story.

We are working diligently with the Mobile District in an effort to reduce our reliance upon federal funding of our project. In the first year (FY'91) after our project was deepened, the District spent almost $22 million to maintain the channel. We are now experiencing an annual budget requirement of between $17,500,000 and $18,000,000 to insure the reliability of the channel. We seek this level of steady state funding for fiscal year '97. At the present time we see two possible solutions to reduce this level even more. One is through the design and installation of mid-channel sumps to improve the efficiency of the dredging process. Secondly, cost reduction could be achieved by modifying the process by which the dredge material is removed from the channel and placed in environmentally suitable locations. Flexibility in handling this dredge material is key to significantly reducing federal costs. We will be seeking Congressional support in these efforts.

As mentioned earlier, the success of the Alabama State Docks and the Port of Mobile is highly dependent upon the operation and maintenance of the six waterway systems through which cargo flows. The systems are the Coosa-Alabama, the Black Warrior-Tombigbee, the Tennessee, the Tri-Rivers (Appalachicola-Chattahoochee-Flint), the Tennessee-Tombigbee and the Gulf Intercoastal Waterway systems. In that their reliability has significant impact of the success of the Port of Mobile, we fully support their testimony today as they request level funding in fiscal year '97.

The port and waterway industries are constantly seeking improved methodologies for the operation and maintenance of federal projects and navigation channels. The most promising source of such improvements is highly dependent on adequate funding of research and development programs within the U. S. Army Corps of Engineers. More specifically, the Waterways Experiment Station (WES) conducts an extremely complex and demanding research and development program in support of dredging operations, environmental research and dredging technical support. The Port of Mobile strongly requests this committee's support in meeting the budgetary requirements of the WES in these key programs. Specifically we support the Dredging Operations and Environmental Research program (DOER), and its focus on broad and basic understandings of ecological impacts of managing dredge sediments. We believe this research will result in the development of new technologies and decision making tools which will improve the efficiency of the national dredging program. The Dredging Operations and Technical Support Program (DOTS) also assists ports and inland waterway systems through the development of scientific based testing manuals, dredge material protocols and disposal site management techniques.

Again, the Alabama State Docks thanks this Committee in its long history of supporting our community as we strive to build on the international market place to produce the highest quality of life possible for the citizens of the State of Alabama and the southeastern United States.

TUESDAY, FEBRUARY 27, 1996.

NORTHPORT LEVEE PROJECT

WITNESS

CHARLES T. SWANN, CITY ADMINISTRATOR, CITY OF NORTHPORT, ALABAMA

Mr. BEVILL. And now we will hear from my good friend Charles Swann, City Administrator of the City of Northport.

And you have several people with you, Charles. Do you have a list of their names?

Mr. SWANN. Yes, sir.

Mr. BEVILL. We would like to recognize them, too, if you will call their names, and we want to get those names in the record and that you are here, and we appreciate your presence.

Mr. SWANN. Thank you, Congressman.

I have with me Councilman Dan Morrison; Councilman Robert Thomas; Mr. Lewis Drummond, Chairman of the Planning and Zoning Commission and Vice President of the Chamber of Commerce; Mr. Waring Blackburn, Director of Planning and Community Development; and Mr. Carl Adams, the leading merchant representing our Downtown Merchants Association.

Good afternoon.

Mr. BEVILL. We are delighted to have each of you here.

Mr. SWANN. Good afternoon, Chairman Bevill and Chairman Myers. It is a pleasure to be here. We appreciate your time.

Before I begin, if I may, I respectfully refer the committee's attention to the appendix in your briefing packet, appendix item No. 1. It exhibits several pictures of Northport's flooding. And appendix item No. 2 is a schematic drawing of what we refer to, proudly refer to as our Renaissance Plan.

As historical background, the city council envisioned a plan in the late 1980s to address two critical issues facing the city; first, a need to protect the existing residential housing, commercial development, and public infrastructure from recurring river floods by the Black Warrior; and, second, a need to revitalize historic downtown Northport. Because this community vision represents a rebirth of the river margin and the historic downtown, this effort is appropriately entitled the Northport Renaissance Plan. Naturally, a key element of that plan is flood protection.

In 1993, under the leadership of the Honorable Tom Bevill, a bipartisan partnership was set in motion to provide flood protection through the Corps of Engineers acting under the authority of the Section 205 program. As a result, Northport was given its first hope in over 180 years of conquering the river flood.

A feasibility study completed by the Corps of Engineers in 1995 clearly demonstrated that construction of a flood control levee was feasible. Naturally, this type of news from the Corps spread like wildfire through the city. Construction of the flood control levee, the cornerstone of the community's Renaissance Plan, would eliminate flooding.

Finally, revitalization was possible. Community pride and enthusiasm reached an all-time high, and naturally so. The vision of our plan was in sight. The Renaissance Plan is expected to generate over $50 million in private investment and will drive our already high benefit-to-cost ratio for the levee to over 10 to 1.

In part, the Renaissance Plan, as a result of the flood control efforts, is also a by-product of the new Oliver Lock and Dam that was completed the 1991 by the Corps. Spoil material excavated during construction of the lock will be used by the Corps to construct the levee, certainly a parsimonious move when every dollar counts.

Considering the high benefit/cost ratio, the community felt secure that the levee project had proven its merit and that the project would move forward in a timely manner. Unfortunately, in November of 1995, we learned that the keystone of Northport's revitalization efforts, the flood control levee, was in jeopardy.

The Section 205 program is critical to the City of Northport. On the basis of congressional pledges in the past years, we have designed our entire Renaissance Plan around the construction of a flood control levee. Without the Section 205 program, there can be no flood control levee, and without a flood control levee, there can be no Renaissance Plan.

Failure to move forward with the Northport Levee Project will result in a loss of more than $1.7 million in committed and expended funds and will be a disaster to the region. To move the levee project forward, the city council has agreed to advance the funds necessary to design the levee. Because the city has a fiduciary responsibility to its taxpayers, we are seeking, in return, assurance that the levee will receive Federal funding for construction.

Northport respectfully requests that Congress give the city assurance that the pledge as set forth in the congressional report language of 1993 and 1994, be honored through one of the following options:

One, that Congress direct the Corps to reallocate available resources in the Continuing Authority's program to fund the estimated $2.5 million Federal share of the design and construction of the Northport Flood Control Levee; or, two, that based on Northport's commitment to fund the design phases of the project, that Congress assure the city that the Northport Levee Project will be added in the next congressional language report and moved to the head of the list; or, three, that Congress support the Corps of Engineers' request to reprogram additional funds to the Continuing Authority program to include sufficient funds for the Northport Levee Project and intercede on the Corps' behalf through the Office of Management and Budget.

Clearly, it is in all of our best interests to work toward a balanced budget, and we applaud Congress for your genuine efforts in this area. However, we in governmental levels have a duty to maintain an element of stability for both public and private decisions that affect our community. To do so, it is necessary that we honor our past commitments. We must not leave the task unfinished. We are asking for your commitment to follow through with the partnership that we forged in 1993.

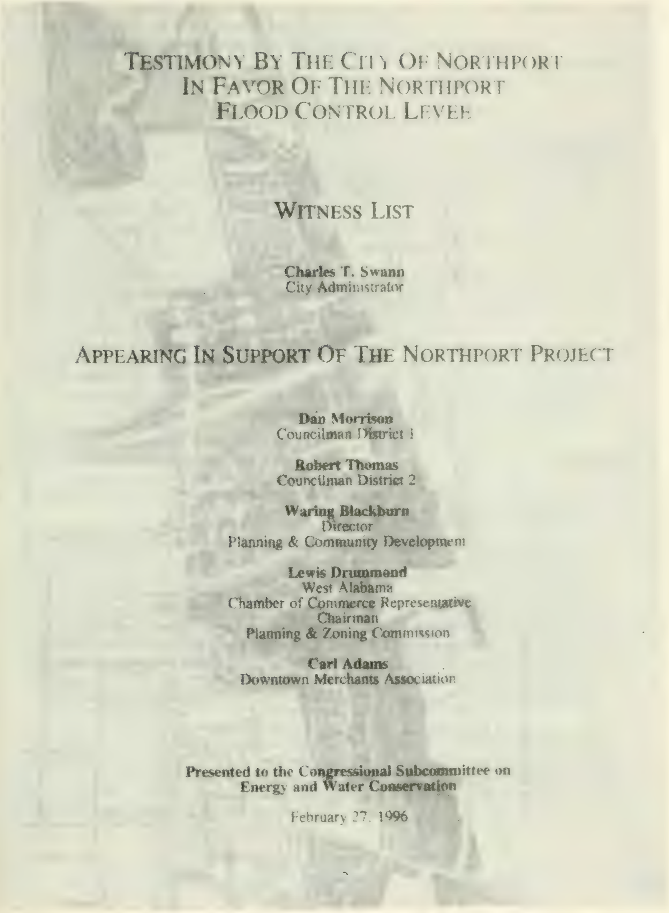
The construction of the levee and the resulting private investment is certainly federalism at its best. On March 30, 1993, the Honorable Tom Bevill summed up Northport's plight best when he said, and I quote: “These good people have had to suffer with this flooding long enough.”

The Honorable Spencer Bachus reaffirmed Northport’s need when he stated we are not talking about some pork barrel request, we are talking about the safety and the well-being of the people of Northport. This project is absolutely necessary.

Chairman Myers and Chairman Bevill and Members of the committee, we thank you for your courtesy and your concern and your interest in our project and in our needs, not only in this particular need but all the needs that you have worked so hard over the last many years for the State of Alabama. If you have any specific questions regarding the Northport Flood Control Project, we will be glad to respond to those.

Thank you.

[The statement of Mr. Swann follows:]



TESTIMONY BY THE CITY OF NORTHPORT IN FAVOR OF THE NORTHPORT FLOOD CONTROL LEVEE

WITNESS LIST

Charles T. Swann
City Administrator

APPEARING IN SUPPORT OF THE NORTHPORT PROJECT

Dan Morrison
Councilman District 1

Robert Thomas
Councilman District 2

Waring Blackburn
Director
Planning & Community Development

Lewis Drummond
West Alabama
Chamber of Commerce Representative
Chairman
Planning & Zoning Commission

Carl Adams
Downtown Merchants Association

Presented to the Congressional Subcommittee on Energy and Water Conservation

February 27, 1996

TESTIMONY BY THE
CITY OF NORTHPORT
BEFORE THE CONGRESSIONAL SUBCOMMITTEE
ON
ENERGY AND WATER CONSERVATION

February 27, 1996

INTRODUCTION

My name is Charles Swann. I am the City Administrator for the City of Northport, Alabama. My purpose today is twofold:

- o I am here to testify **in favor** of the Continuing Authority Program, Section 205 of the Flood Control Act of 1948; and,
- o I am here to request this Subcommittee's support of the **Northport Flood Control Levee**, a project for which detail design was scheduled to begin this year under the Section 205 Program.

With me are Councilman Dan Morrison; Councilman Robert Thomas; Mr. Waring Blackburn, Director of Planning and Community Development; Mr. Lewis Drummond, Chairman of our Planning and Zoning Commission and Vice President of the Chamber of Commerce; and Mr. Carl Adams, a leading merchant representing our Downtown Merchants Association.

HISTORY

As historical background, the City Council envisioned a plan in the late 1980's to address two (2) critical issues facing the City:

- o A need to protect existing residential housing, commercial development and public infrastructure from reoccurring floods by the Black Warrior; and,
- o A need to revitalize historic Downtown Northport.

Concurrently, the Council also realized the economic opportunity that presented itself in the development of the adjacent river margin from which Northport grew 180 years ago. Because this community effort represents a **"rebirth"** of the river margin and historic downtown, it was appropriately entitled the **Northport Renaissance Plan**. Naturally, the key element of the Plan is **flood protection**.

The long-range Renaissance Plan has as its stated goals:

- o Enhancement of tourism
- o Promotion of public and private investments
- o Development and redevelopment of the area

- Historic preservation
- Expanded educational opportunities
- Support and encouragement of cultural activities, including the Kentuck Arts and Crafts Festival and Dickens Downtown Christmas Celebration
- Provision of recreational opportunities
- Expansion of the City's revenue base
- Flood protection for existing public infrastructure

The Renaissance Plan is expected to create a new Northport, with a new image and a new sense of community that is rooted in its uniqueness.

The major features of the **Renaissance Plan** are:

- A Flood Control Levee with river walk
- Landscaped streets and parking areas
- Rehabilitation of the downtown historic district
- Commercial, office, and hotel developments
- Relocation and enlargement of Kentuck Park
- Expanded playing fields for little league baseball
- Housing units overlooking the Black Warrior River, Hargrove Creek and Twomile Creek
- A sports complex
- A par-three golf course
- Interpretive sites and museum
- Riverboat rides and river taxi
- Amphitheater and water theater
- Redevelopment of existing public housing
- Protection of National Register - listed buildings and sites, including Alabama's first public road

The community's vision eventually led to Northport's involvement with the Section 205 Program.

On March 30, 1993, a respected member of this subcommittee, the Honorable Tom Bevill, summed up Northport's plight when he said "These good people have had to suffer with this flooding for long enough." The Honorable Spencer Bachus reaffirmed the need when he stated "We're not talking about some pork barrel request, but we're talking about the safety and well being of the people of Northport. This project is absolutely necessary." With those words, a **bipartisan partnership** was set in motion to provide flood protection through the Corps of Engineers under the authority of the Section 205 Program. As a result, Northport was given its first hope in 180 years of conquering the river flood.

A "Reconnaissance Study" was completed by the Corps in 1993 and indicated that construction of a flood control levee appeared practical. The Corps recommended that Northport conduct a "Feasibility Study" and, thanks to this Subcommittee and Congressman Bevill, funding for the "Feasibility Study" was approved under the Section 205 Continuing Authority Program.

The "Feasibility Study", completed in 1995 and approved by the Corps of Engineers last month, clearly demonstrated that the best alternative for flood protection was the construction of a two-mile long flood control levee.

News from the Corps spread through the City like wildfire!

Construction of the Flood Control Levee, the **cornerstone** of the community's Renaissance Plan, would eliminate flooding. Finally, revitalization was possible. **Community pride and enthusiasm reached an all-time high, and naturally so.** The vision of our Plan was in sight.

The City's consultant for the Renaissance Plan has estimated that the Plan will generate over $50 million in private investment. With a benefit/cost ratio of the levee calculated to be 1.6 : 1, the private investment triggered by the Plan will drive the benefit/cost ratio to over 10 : 1. The commitment of local businesses to our community, coupled with the anticipated construction of the Levee, has already resulted in substantial private investment in the area.

In part, the **Plan** is a by-product of the new Oliver Lock and Dam completed in 1991 by the Army Corps of Engineers. Spoil material excavated during construction of the Lock will be used by the Corps to construct the Levee: Certainly a parsimonious move when every dollar counts.

Considering the high benefit/cost ratio, the community felt secure in the belief that the Levee Project had proven its merit and that the project would move forward in a timely manner. Unfortunately, in November of 1995, we learned that the keystone of Northport's flood protection and revitalization efforts, the Flood Control Levee, was in jeopardy.

SIGNIFICANCE OF THE SECTION 205 PROGRAM

The Section 205 Program is a crucial component of Northport's efforts to protect its riverfront and historic district and the Program is Northport's **only hope** to assure that future opportunities will not be lost to the river flood.

Northport's key location on the Black Warrior River has made it the "hub" of commercial and industrial trade routes throughout the southeast. Thus, its value as a trade center has outweighed its continuing struggle against the vengeance of the River that was both the reason for Northport's existence and its nemesis. For 180 years, thousands of families have courageously struggled to claw out an existence, only to have their life's work wiped out in a few hours by the unforgiving river.

The Section 205 Program is critical to Northport. On the basis of Congressional pledges in past years, we have designed our entire Renaissance Plan around the construction of a flood control levee. Without the Section 205 Program, there can be no flood control levee. Without a flood control levee, there can be no rehabilitation of the river front. Without rehabilitation of the river front, there can be no Renaissance.

REQUEST

The City Council recognizes that failure to move forward with the Northport Levee Project will result in a loss of more than $1.7 Million in committed and expended funds and will be a disaster for the region. Consequently, to demonstrate Northport's commitment to the project, the City Council has agreed to advance the necessary funds to accomplish the detailed design of the Levee on a reimbursable basis. Because the Council has a fiduciary responsibility to its taxpayers, the City is seeking, in return, assurance that the Levee will receive federal funding for construction. This is the only basis on which the City Council can comfortably advance these funds.

Northport respectfully requests that Congress, through this Subcommittee, give the City assurance that the earlier pledges set forth in the Congressional Report Language of 1993 and 1994 be honored by one of the following options:

1. That Congress direct the Corps to reallocate available resources in the Continuing Authorities Program to fund the estimated $2.5 million federal share of the design and construction of the Northport Flood Control Levee; or,

2. That, based on Northport's commitment to fund the engineering design phase of the project, Congress assure the City that the Northport Levee Project will be added in the next Congressional Language Report and moved to the head of the list; or

3. That Congress support the Corps of Engineer's request to reprogram additional funds to the Continuing Authority Program to include sufficient funds for the Northport Levee Project and intercede on the Corp's behalf with the Office of Management and Budget (OMB).

SUMMARY AND CONCLUSION

Clearly, it is in all of our best interests to work toward a balanced budget and we applaud Congress for their genuine efforts. However, we in government, at all levels, have a duty to maintain an element of stability for public and private decisions that affect our community. To do so, it is necessary that we honor our past commitments. We must not leave the task unfinished!

We are asking for your commitment to follow through with the partnership that we forged in 1993. The construction of the Levee and the resulting private investment is Federalism at its best.

Mr. BEVILL. Thank you, Charles. Thank you for your very fine presentation.

And, like you mentioned, you were shocked there in November 1995, to learn the situation, and I was, too. Actually, what happened, the 205 program, as we say, this was one of the, I guess, hundreds, Bob? Many more that they were shortchanged on the money on the appropriation, and so I had the same experience you did with this because I am familiar with this need. I am certainly hoping that we can do something this time. There is no way to guarantee anything.

Mr. SWANN. I understand.

Mr. BEVILL. Especially at this time.

Mr. SWANN. Thank you very much.

Mr. BEVILL. But I am very interested and the committee is very interested, and you have made a very good presentation here, and I certainly hope we can get this project under way.

I wondered, did you-all get the dirt? I remember we arranged for getting the dirt there from the Oliver Lock and Dam to be brought down and to be a part of the, along the river there, and the excellent plan that Northport has put together there for beautification, and all that tied in with it. Has that been done?

Mr. SWANN. Yes, we have the material. The spoil from the Oliver Lock and Dam has been stockpiled on city property; and, in fact, that material will be used to construct the levee. It has already been tested and it is good—it is sufficient material to be used, and all we are waiting on is $2.5 from Congress and we will be ready to go.

Mr. BEVILL. Well, we will have to work on that.

Mr. SWANN. Yes, sir, thank you.

Mr. BEVILL. And thank you very much.

Thank you all.

Mr. MYERS. Very fine brochure, too. A lot of work in this.

Mr. BEVILL. This is a good job.

Mr. MYERS. A couple of things are dated; coffee, 19 cents a pound.

Mr. SWANN. Yes, sir. We have been flooding in Northport for over 125 years, so some of those pictures are a little dated.

Mr. MYERS. In one of them, “Roy Rogers and My Pal Trigger” is playing at the local theatre.

TUESDAY, FEBRUARY 27, 1996.

WALLISVILLE LAKE PROJECT

WITNESS

JANICE BEZANSON, ISSUES COORDINATOR, TEXAS COMMITTEE ON NATURAL RESOURCES

Mr. MYERS. Our last witness this morning is Janice Bezanson, Coordinator of the Texas Committee on Natural Resources.

Jan, pleased to have you.

Your prepared statement will be placed in the record, and you may proceed for 5 minutes as you like, and we apologize for the delay.

Ms. Bezanson. That is fine.

We appreciate very much being able to be here, Mr. Chairman, Chairman Bevill, and Members of the committee, I am Janice Bezanson with the Texas Committee on Natural Resources, which is a 30-year-old statewide conservation organization in Texas.

I am here to ask you not to fund the Wallisville Reservoir Project on the South Trinity River in Texas. Last year, some of the Members of the Texas delegation from Houston wrote a letter to this subcommittee and said that the environmental interests in Texas were assuaged by changes in this project. Since that time, Aid to Texas and two national organizations, far from being assuaged, are still very much opposed to this project.

I have included a long number of reasons in my written testimony for our opposition. I will not go into all of them, but I would like to hit just a couple of high points.

Our opposition is based on two different things, one is cost and one is environmental damage. This project would cost an estimated $31.5 million, which is being paid for in kind of an unusual way. It is because it was authorized a long time ago, and still 85 percent of it is being covered by Federal tax dollars. The 15 percent local part is a 50-year payback with very favorable terms.

This project is no longer a multiple-use project that would qualify for that kind of terms as it had in the past. In the 1950s, this was proposed as a barrier for saltwater intrusion, later it was proposed as an impoundment, later it was proposed as a smaller impoundment, now it is back to being a saltwater barrier. And there are cheaper structures and nonstructural alternatives which are a considerably cheaper way to do it than building the whole dam, which they propose to do.

The environmental costs could be very, very high, lowering freshwater inflows to Galveston Bay, raising the salinities at critical times of the year, reducing sediment and nutrient inflows, and blocking the migration of striped bass, shrimp and other aquatic organisms that go upstream to spawn.

These damages are not just environmental, they are also economic. The commercial fisheries, the shellfish harvesting, and the tourism from sport fishing in the Galveston area represents billions of dollars in economic activities, and this reservoir could have a strong economic detriment to those things.

It is definitely not a partisan issue. This project has been opposed by the Reagan administration, the Bush administration and the Clinton administration in the past, and it also faces opposition from the State game and fish agencies, the Texas parks and wildlife departments. It is in opposition to the Galveston Bay Estuary Program, which is a federally established program, and we respectfully request that you not fund the continued construction of this project.

Mr. Myers. Well, thank you very much for your testimony.

Ms. Bezanson. Thank you for your time.

[The statement of Ms. Bezanson follows:]

TEXAS COMMITTEE ON NATURAL RESOURCES
601 WESTLAKE DRIVE
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February 27, 1996

TESTIMONY TO THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
COMMITTEE ON APPROPRIATIONS
OF THE U.S. HOUSE OF REPRESENTATIVES

By Janice Bezanson, Issues Coordinator

Mr. Chairman:

Thank you for the opportunity to submit comments on the 1997 Energy and Water Development Appropriations bill.

Texas Committee on Natural Resources (TCONR), a 25-year-old statewide conservation organization, requests that the Subcommittee include no appropriation in this year's bill for further construction of the Wallisville Reservoir on the Trinity River in Texas. TCONR supports removal of the obsolete dam and lock structures, endorses restoration of damaged and destroyed wetlands, and urges conversion of the site lands to Wildlife Refuge status, but we strongly oppose any further construction on the dam itself. Our reasoning for opposing continued work on the dam follows:

(1) Through its many planning iterations, Wallisville has been intended at times for a salt-water barrier and at other times for water supply. The Corps maintains that water supply is no longer a consideration at the site. Control of saltwater intrusion could be accomplished at a much lower cost with other types of structures than the current proposal and possibly by non-structural means.

(2) The federal government is assuming all up-front costs of completing the dam, estimated to cost $31.5 million, with the local sponsors (the City of Houston and the Trinity River Authority) providing only 15% of the cost at a leisurely 50-year payout -- cost shares, interest rates, and payout terms far more favorable than are available on other current water works projects.

(3) Completion of the reservoir could significantly lower freshwater inflows and raise salinities in Trinity Bay to as high as 30 parts per thousand in July and August (the typical average

is 17 ppt), harming the productive shrimp and oyster fishery on which many jobs depend.

(4) A completed reservoir would reduce sediment and nutrient inflows, damaging the Bay substrate and nutrient cycles.

(5) Completion of the reservoir would block migration of striped bass, shrimp, and other marine organisms which go upstream to spawn, harming the valuable sport fishing industry as well as commercial fisheries.

(6) A completed reservoir could harm upstream and downstream wetlands: the existing structures alone have been associated with a 14% decline in emergent vegetation, 51% reduction in mudflats, and a 49% increase in open-water areas in the downstream region from the 1950's through 1979.

(7) Federal funding has proceeded despite Texas Natural Resource Conservation Commission's failure to extend Wallisville's permit, which was contingent on the local sponsors' completion of environmental studies that were never done.

(8) Wallisville dam would include locks to service the Trinity River Barge Channel, a highly questionable and subsidized project that sees use by an average of only 1.6 barges per year, at a public cost of $283,000 per barge.

(9) The originally claimed multiple purposes of the reservoir which once qualified it for federal support have been drastically scaled back -- a situation which should remove the project's eligibility for such support.

(10) Although proponents claim that the new reservoir design has the support of the City of Houston, the Houston Water Master Plan, of which Wallisville is a part, has never been publicly debated and approved by the City.

(11) The Wallisville project has been opposed by the Reagan, Bush, and Clinton administrations and faces opposition from the Texas Parks and Wildlife Department as well.

(12) Other less damaging options exist for serving Wallisville's avowed purpose of providing Houston with water -- conservation, purchase of Trinity irrigation water rights, and other alternatives.

(13) The Wallisville project conflicts with the avowed purposes of the Galveston Bay Estuary Program.

(14) If the project were scuttled the resulting surplus federal land could become an excellent 20,000-acre wildlife refuge, more if linked with the 52,000 acres of the USFWS-proposed Dolan-Davis Hill/Tanner Bayou site.

We urge that Congress grant no further funding for the Wallisville Reservoir, at a significant saving to federal taxpayers and to the great benefit of the Trinity and Galveston Bay systems.

Thank you for your attention to this important issue.

Mr. MYERS. The committee will stand adjourned until 2 o'clock this afternoon when we will resume the hearings.

TUESDAY, FEBRUARY 27, 1996.

LOWER MISSISSIPPI VALLEY PROJECTS

WITNESS

HON. BLANCHE L. LINCOLN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARKANSAS

Mr. MYERS. The committee will come to order.

We do not have our full delegation yet, but we have a busy schedule. Here comes Tom now. I just dropped the gavel, Tom.

Your prepared statements will be placed in the record, if you would like to proceed as would like.

Mrs. LINCOLN. Oh great, great. I will go ahead and begin, Mr. Chairman.

I want to thank you so much for affording me the opportunity to appear before you in support of the Corps of Engineers' water resource projects for the fiscal year 1997 in the First Congressional District of Arkansas.

I am truly honored to be here. Both of you gentlemen, you and Mr. Bevill, have been wonderful to me in the 4 years I have served here. You have been mentors and been very kind in helping me achieve what I have set out to accomplish on behalf of my constituents, and to both of you I owe a great deal of gratitude and I appreciate being here today.

Mr. Chairman, I want to thank you and the other Members of the subcommittee for your work in the past and for your understanding of the importance of our water projects to both the environmental and the economic health of my district.

I want to state for the record that I am very concerned about the effect of the current budget reductions on the construction, operation and maintenance of the Corps' water resource projects. Although I am a staunch supporter of a balanced budget, and I think my voting record certainly reflects that, these investments are vitally important to the people of the First Congressional District of Arkansas as well as to the whole country. And you gentlemen represent districts, I know, where you understand that and are in agreement.

Agriculture remains the backbone of our economy, and the Corps' support is extremely important to agribusiness. Additionally, we will not put at risk the homes and lives of those millions of individuals who rely on the Corps of Engineers to control erratic rivers.

I want to ask the subcommittee to support continued funding of the Corps' flood control and navigation projects, which are critical to the economic growth and security of the lower Mississippi Valley.

As you may know, I am no stranger to the value of the Corps' work. Having grown up in Helena, Arkansas, right along the Mississippi, I learned at an early age that the health of our town and our region was forever bound to the Mississippi River. My father, who you all have met, is a member of the lower Mississippi Valley Flood Control Association Board, and he impressed upon me the various ways the Corps' projects benefitted our town and our community.

I have followed in my father's footsteps with the association, serving currently as their President, and I must say, I follow quite a distinguished line of former presidents with the Lower Mississippi Valley Association, the Chairman included.

The Corps has drained areas that turned unused property into valuable farmland. They have protected dry land from the volatile nature of the rivers and the Corps has continued to maintain our waterways for the consistent flow of commerce that is so vital to our primarily agriculture region.

Mr. Chairman, although my father was not able to attend today, as he has many times in the past, several of our—

Mr. MYERS. I was looking for him.

Mrs. LINCOLN. He is not back there rooting for me as he was in the past.

Mr. MYERS. He sat back there in the back.

Mrs. LINCOLN. Several of our colleagues are here to show their support for these projects, and I think you have noticed time and time again, year after year, that they are very, very much supportive and they come annually to this meeting to show that support and to thank this subcommittee for its past assistance and understanding of their issues.

Mr. Chairman, the projects that I am here to support today are vital to the progress of our rural communities. My district is one of the most productive agricultural regions in the country. We rank highly nationally in the production of rice, cotton, soybeans and wheat. We depended heavily on irrigation projects as well as river maintenance and navigation so our commodities can move into the world market.

My colleague, Ray Thornton, with the waterways in and around Little Rock, also relys on navigable waterways to move commodities as well as products on the lifeblood of those rivers to the world marketplace. The Mississippi River is the gateway to many emerging markets and we must continue to strengthen and improve the infrastructure that has helped to make our products the best and the most readily available in the world.

I urge the subcommittee to support the funding of these projects to the full level of the Corps of Engineers' capabilities. I am very excited that one of our former colleagues, the Honorable Martin Lancaster, has been appointed and confirmed as the Assistant Secretary of the Army for Civil Works, a position which we have been anxiously awaiting to be filled, and I think we can all feel comfortable that our colleague Martin Lancaster will do an excellent job there.

In his first year in office, I believe it is vital we provide him with all the resources available to complete his mission, and I think we can all help him to better understand that mission.

As the current President of the Lower Mississippi Valley Flood Control Association, I would specifically request funding at not less than $350 million for the Mississippi River and tributary work items, based on our informal estimates and would certainly like to encourage and ask the subcommittee Chairman if we could work with him in furthering those numbers and those issues.

The projects that are located specifically within my district I have listed with great detail in my submitted testimony. There are several of them I can mention, and I won't take too much time to do that. However, I would like to emphasize the importance and the strong congressional support for two projects in particular, the Helena and Vicinity Project as well as the Batesville Emergency Streambank Protection Projects, for which I have included suggested bill and report language in my submitted testimony.

If America wants to continue to be a force in the world market we must build and strengthen our current infrastructure. Since my district is the second largest steel producer in the country, and most people are not aware of that, I know that strong infrastructure is vital not only to agriculture but to all industry. I think that the subcommittee will find ample evidence that these projects are prudent and necessary investments in the future of our districts and our future as a Nation.

On behalf of the people of the First Congressional District of Arkansas, and the State of Arkansas, I thank you, Mr. Chairman, and the Members of the subcommittee for all of your time and assistance in the past and the present toward making these projects successful.

I hope that you can continue to give your positive support to these worthwhile efforts in the 1997 budget.

Thank you, Mr. Chairman.

[The statement of Mrs. Lincoln follows:]

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SUBCOMMITTEE ON HEALTH AND ENVIRONMENT
SUBCOMMITTEE ON COMMERCE, TRADE
AND HAZARDOUS MATERIALS

Congress of the United States
House of Representatives
Washington, DC 20515–0401

Statement of the Honorable Blanche L. Lincoln
Subcommittee on Energy and Water
Committee on Appropriations
U.S. House of Representatives
FY 1997 Appropriation for the Corps of Engineers
February 27, 1996

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE: Thank you for affording me this opportunity to appear before you in support of the Corps of Engineers water resource projects for FY '97 in the First Congressional District of Arkansas. I am honored to be here.

Mr. Chairman, I want to thank you and other members of the subcommittee for your work in the past and your understanding of the importance of our water projects to both the environmental and economic health of my District.

I want to state for the record that I am very concerned about the effect of the current budget reductions on the construction, operation, and maintenance of Corps water resource projects. Although I am a staunch supporter of a balanced budget, these investments are vitally important to the people of the First Congressional District of Arkansas, as well as the whole country. Agriculture remains the backbone of our economy, and the Corps' support is extremely important to agribusiness. Additionally, we can not put at risk the homes and lives of those millions of individuals who rely on the Corps of Engineers to control erratic rivers. I want to ask the subcommittee to support continued funding of Corps flood control and navigation projects, which are critical to the economic growth and security of the lower Mississippi Valley.

As you may know, I am no stranger to the value of the Corps' work. Having grown up in Helena, Arkansas, I learned at an early age that the health of our town and our region was forever bound to the Mississippi River. My father, a member of the Lower Mississippi Valley Flood Control Association Board, impressed upon me the various ways the Corps' projects benefitted our town. I have followed in my father's footsteps with the Association, serving currently as its president.

The Corps has drained areas that turned unused property into valuable farmland. They have protected dry land from the volatile nature of the river. And the Corps continues to maintain our waterways for the consistent flow of commerce that is so vital to our primarily agricultural region. Mr. Chairman, although my father was not able to attend today as he has many times in the past, several of our colleagues are here to show their support for these projects and to thank the subcommittee for its past assistance.

Mr. Chairman, the projects that I am here to support today are vital to the progress of our rural communities. My district is one of the most productive agricultural regions in the country. We rank high nationally in the production of rice, cotton, soybeans and wheat. We

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depend heavily on irrigation projects, as well as river maintenance and navigation so our commodities can move into the world market. The Mississippi River is the gateway to many emerging markets and we must continue to strengthen and improve the infrastructure that has helped to make our products the best and most readily available in the world.

I urge the subcommittee to support the funding of these projects to the full level of the Corps of Engineer's capability. I am very excited that one of our former colleagues, the Honorable Martin Lancaster, has been appointed and confirmed as Assistant Secretary of the Army for Civil Works. In this his first year in office, I believe it is vital that we provide him with all the resources available to complete his mission. As the current president of the Lower Mississippi Valley Flood Control Association, I would specifically request funding of not less than $350 million for Mississippi River and Tributary work items, based on our informal estimates.

The projects that are located specifically within my district are as follows:

Mississippi River and Tributaries Appropriation

- Helena and Vicinity
- Eastern Arkansas Region (Comprehensive Study)
- Eight Mile Creek, Arkansas
- St. Francis Basin Consolidated Construction
- St. Francis Basin (Operations and Maintenance)
- White River Backwater (Operations and Maintenance)
- Whiteman's Creek
- Mississippi River Levee Project

Other Appropriations

- Batesville Emergency Streambank Protection
- Greers Ferry Lake (Operations and Maintenance)
- Greers Ferry Lake Park Road Overlay
- Montgomery Point Lock and Dam
- Osceola Harbor
- White River (Operation and Maintenance)
- Helena Harbor Arkansas (Operation and Maintenance)

I have attached to my testimony a brief description of each project I have named and I ask that it be included for the record. I want to emphasize the importance and strong congressional support of two projects in particular, the Helena and Vicinity project, and the Batesville Emergency Streambank Protection project, for which I have attached suggested bill and report language. If America wants to continue to be a force in the world market, we must build and strengthen our current infrastructure. Since my district is the second largest steel producer in the country, I am aware that strong infrastructure is vital not only to agriculture, but to all industry. I think that the subcommittee will find ample evidence that these projects are prudent and necessary investments in our future.

On behalf of the people in my district, I thank you Mr. Chairman and members of the subcommittee for all your time and assistance in the past and present toward making these projects successful. I hope that you continue to give your positive support to these worthwhile efforts in the FY '97 budget.

INDIVIDUAL PROJECT SUMMARIES

MISSISSIPPI RIVER AND TRIBUTARIES APPROPRIATION

Helena and Vicinity, Arkansas -- This much-needed flood damage protection project has been under study for several years at considerable investment, with project engineering and design efforts completed in 1995. The local sponsors for this project are willing and able to meet their obligations at this time. Funds could be used to initiate construction of this project in 1997. I request that construction funding be earmarked in the bill and report language at $150,000 for 1997.

Eastern Arkansas Region (Comprehensive Study) (EARCS) -- The EARCS project produced one of the first cost-shared feasibility studies conducted by the Corps. The State of Arkansas, through its Arkansas Soil and Water Conservation Commission invested approximately $2 million in this work. EARCS addresses critical water resource management problems in a 24 county region. It specifically deals with a region served by a threatened underground aquifer, in which the Corps has long identified a need for improved surface water management.

Agricultural water supply has been identified, in federal law, as a responsibility of the Corp of Engineers. Four years ago, Congress included earmarked funding in the appropriations law to initiate preconstruction engineering and design work on a demonstration project in connection with EARCS. They received $1 million in 1993, $2.4 million in 1994, and $3 million in 1995. The President included $2.2 million for this project in his 1996 budget to continue this important work, which was the amount Congress approved.

Eight Mile Creek, Arkansas -- To continue construction of this flood damage protection project. The President included $580,000 in his 1996 budget for this work, which the Congress approved.

St. Francis Basin Consolidated Construction -- For the continued construction of this critically important flood damage protection project. This project was funded at $8.7 million in 1995 and $10.0 million this year.

St. Francis Basin (Operations and Maintenance) -- To continue operation and maintenance of this vital flood protection project. It was funded at $9.363 million this year.

White River Backwater (Operation and Maintenance) -- For operation and maintenance of this flood damage protection project. This work is funded at $1.8 million in 1995 and $1.258 million this year.

Whiteman's Creek, Arkansas -- For continuation of work on this flood damage protection project. In the past 24 years, four major and a number of less severe storms have damaged homes, businesses and public structures in the project area. This project was funded at $850,000 this year.

OTHER APPROPRIATIONS

Batesville Emergency Streambank Protection -- Forty years ago, Batesville, Arkansas, purchased an old Corps constructed lock and dam, which has not been used for navigation since the time of purchase. However, the upstream training wall has collapsed, creating a hazardous situation with considerable debris. In addition, adjacent bank erosion along the White River is endangering the city's water supply intake, which is the sole source of water for some 30,000 local residents. I request that language be included in the committee report directing the Corps proceed immediately with an emergency streambank protection project, including removal of the wall and debris. All work could be completed for approximately $500,000. Delays in this project will pose a threat to public health and safety and increase costs of necessary repairs.

Greers Ferry Lake (Operations and Maintenance) -- For operation and maintenance of the multi-purpose reservoir. This project provides flood damage protection, hydroelectric generation and outdoor recreation. This project was funded for $4.447 million in 1996.

Greers Ferry Lake Park Road Overlay -- This project is necessary so that Greers Ferry Park can continue to provide outdoor recreation to thousands of visitors. To complete the road overlay, an additional $200,000 is needed beyond the normal Operations and Maintenance funds.

Montgomery Point Lock and Dam -- This project is vital to insure the continued usability of the McClellan-Kerr Arkansas River Navigation System. The waterway has created some 53,000 jobs and is a vital transportation link to those who live and work along the river. This project was funded at $3.4 million for 1996 (contained in the total appropriation of $6.0 million for the McClellan-Kerr Arkansas River Navigation System.)

Osceola Harbor -- For annual operation and maintenance at this harbor project on the Mississippi River. This project was funded at $453,000 for 1996.

White River (Operation and Maintenance) -- For operation and maintenance of this navigation project, which is funded at $2.2 million for 1996.

Helena Harbor Arkansas (Operation and Maintenance) -- For operation and maintenance of this recently completed harbor project on the Mississippi River.

Helena and Vicinity, Arkansas

Committee Report Language

The Committee is aware of the need for flood control improvements to relieve severe flooding problems in the City of Helena, Arkansas. Therefore, the Committee directs the Secretary of the Army to use $150,000 to initiate construction of the Helena and Vicinity, Arkansas Project.

Appropriation Bill Language

Provided further, that the Secretary of the Army, acting through the Chief of Engineers, is directed to use $150,000 of available funds to initiate construction of the Helena and Vicinity, Arkansas Project.

Batesville Emergency Streambank Protection

Committee Report Language

The Committee is aware of the need for emergency streambank protection to eliminate hazardous conditions and protect the sole water supply for the City of Batesville, Arkansas. Therefore, the Committee directs the Secretary of the Army to use $500,000 to initiate an emergency streambank protection project.

Appropriation Bill Language

Provided further, that the Secretary of the Army, acting through the Chief of Engineers, is directed to use $500,000 of available funds to initiate construction of the Batesville Emergency Streambank Protection Project.

TUESDAY, FEBRUARY 27, 1996.

LOWER MISSISSIPPI VALLEY PROJECTS

WITNESS

HON. RAY THORNTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARKANSAS

Mr. MYERS. Ray.

Mr. THORNTON. Thank you, Mr. Chairman.

Let me endorse what my colleague Congresswoman Lincoln has said and to point out that not only is her district the second largest steel-producing district in the country, but when it comes to the character of its people, as reflected by Buddy Portis' novel, "true Grit," we also have steel in the character of our people, and we are going to miss Blanche Lincoln in the halls of Congress.

I am here to support her efforts in the First District and my colleague Jay Dickey's efforts for the Fourth District. I don't know if Jay has come in yet.

Mr. MYERS. He was here and left.

Mr. THORNTON. In the Fourth District, the Red River Valley on the southwestern side of the State is in need of continued attention. It is a mistake to think that we can reduce capital investment under the guise of saving money, because cutting investment does not save money. The failure to make a proper investment costs all of us dearly, not only in flood control but in the economic well-being of the districts that we all have the privilege of serving.

In my own second district there are a number of items which I hope I may be able to call to the attention of the staff as we move forward through this process, but in particular the continued support for the Montgomery Point Lock and Dam at the mouth of the Arkansas is of vital importance not only to Arkansas but to Oklahoma and other navigation users of the Arkansas River.

In my district, the continued development, repair and maintenance of Arkansas River levies that provide flood control for Conway North Little Rock and other cities is vitally important, and I appreciate the opportunity to share with the committee the highest priorities in my district. Mr. Chairman, I just ask that you listen carefully to the people from Arkansas who are here before you, these are good people who are filled with common sense and a realistic appreciation for the job that we have before us.

As we build and improve our Nation, we need to emphasize our investment in water resources, a view that I know that you and the Ranking Member, Mr. Bevill, share.

Thank you very much.

Mr. MYERS. Well thank you, Ray and Blanche.

Blanche, we are going to miss you. You have had a short-term here. Compared to what Tom and I have been here, you seem like a short-termer but, you have made a very significant contribution.

Mrs. LINCOLN. Thank you. I appreciate that, Mr. Chairman. And I have to say for those of us that have been here for just a short time, we are only capable of doing that because gentlemen like yourself have shared with us the knowledge and the wisdom that has allowed us to be able to serve the people that sent us. So thank you.

Mr. MYERS. Well, thank you, and I hope your father is not serious.

Mr. BEVILL. Mr. Chairman, if I may, I want to commend both of them. They have been a tremendous help and support to this appropriation's panel and certainly we are going to do what we can to accommodate you.

Mrs. LINCOLN. Thank you.

Do you have questions of us?

Mr. MYERS. No. I am sure we will hear from you. I hate to have you leave but——

Mr. BEVILL. We have not heard the last of them.

Mr. MYERS. I am sure we are going to hear from Jay.

Mr. THORNTON. Thank you, Mr. Chairman.

Mr. MYERS. Thank you for your testimony.

TUESDAY, FEBRUARY 27, 1996.

LOWER MISSISSIPPI VALLEY PROJECTS

WITNESSES

GEORGE C. GRUGETT, EXECUTIVE VICE PRESIDENT, LOWER MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION

DAVID SOLOMON, MEMBER, EXECUTIVE BOARD, LOWER MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION; PRESIDENT, WHITE RIVER DRAINAGE DISTRICT OF PHILLIPS AND DESHA COUNTIES, HELENA, ARKANSAS

CURTIS PATTERSON, MEMBER, EXECUTIVE COMMITTEE, LOWER MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION; DIRECTOR, PUBLIC WORKS AND FLOOD CONTROL, LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT, STATE OF LOUISIANA

Mr. MYERS. A fellow by the name of George Grugett. Is there a George Grugett?

Blanche and Ray, if you would like to stay you are free to join us.

Mrs. LINCOLN. I am going to sit right back here.

Mr. GRUGETT. There are two speakers today, Mr. Chairman, if I can get them up, and they will do the speaking for the association.

Mr. MYERS. Well, they are no strangers to this association.

Mr. GRUGETT. No, sir, not at all.

Mr. MYERS. Well, thank you.

Mr. SOLOMON. Mr. Chairman and distinguished Members of the committee, my name is David Solomon, and I am from Helena, Arkansas. My only claim to fame is my Congresswoman is Blanche Lambert Lincoln. I am the President of the White River Drainage District of Phillips and Desha Counties, Arkansas and I also serve as a member of the Executive Committee of the Lower Mississippi Valley Flood Control Association. I appear here as a spokesman for that association to present their views on the fiscal year 1997 budget for the Mississippi River and Tributaries Project.

I will present several items of general interest to all our membership and then call upon our other spokesman, Mr. Curtis Patterson, from Louisiana, to testify concerning specific items.

Mr. Chairman, I assure you we will be as brief as possible, and I have submitted a more detailed statement that I request be made a part of the record.

Mr. MYERS. Your entire prepared statements will be placed in the record.

Mr. SOLOMON. Thank you, sir. I hope most of you are familiar with our association, and certainly I know that those in attendance are. I describe the organization objectives in my written statement, so in the interest of time I will not repeat that but I will be very happy to answer questions that anyone might have concerning the association.

Let me briefly state that the Lower Mississippi Valley Flood Control Association represents practically all of the levee and drainage districts, municipalities, port and harbor commissions, and other State agencies in the Lower Mississippi Valley extending from the vicinity of Hannibal, Missouri to the Gulf of Mexico. These organizations and agencies are political subdivisions of the various States in which they are organized and function. The States of Illinois, Missouri, Kentucky, Tennessee, Mississippi, Arkansas, and Louisiana.

We have appeared before this committee for well over 60 years in order to provide the Congress with the data to justify adequate appropriations to complete the Mississippi River and Tributaries Project as quickly as possible. Briefly stated, we are the agency that provides the means for all the people of our great valley to speak and act jointly on all flood control, bank stabilization, navigation and major drainage problems.

For over 60 years the Executive Committee of the Lower Mississippi Valley Flood Control Association has closely examined the budget as submitted for the Mississippi River and Tributaries Project prior to testifying before this subcommittee. This year marks the first time in that span of years that we come before you without knowledge of what will be included in the budget for fiscal year 1997.

Mr. Chairman, even though we cannot discuss specific numbers for the Mississippi River and Tributaries Project today, we do have serious problems that relate to both our project and this Nation as a whole that we feel must be discussed.

We are deeply appreciative of this opportunity to appear before this subcommittee today. We are a month earlier than our normal schedule but, as you can see, we have our usual large crowd with us representing all 7 States of the Lower Mississippi Valley.

I and many others in this crowd have appeared before this committee for more years than we like to remember. Today, even though we are pleased to be here, it is a sad day for us. Mr. Chairman, it is most difficult to comprehend that neither you nor Mr. Bevill will be on this committee after this year. You both have been not only kind and considerate over the years but you have also been knowledgeable of our needs and generous in your allowances. Most of all, and what will be missed the most, is the fact that you both have been strong personal friends and we hope that never ends.

Now, let me return to a brief discussion of the problems I mentioned earlier. Mr. Chairman, I do promise to recommend some dollar amounts that we hope will be used when this committee initiates its discussions on the fiscal year 1997 appropriations.

Last year, we discussed with you the serious problem that the Corps of Engineers had experienced with their inability of expending the funds appropriated to them for at least 2 years.

We as the local sponsor and partner of the Corps of Engineers felt that at least part of the blame for that problem could be attributed to the Corps' recent movement away from the things they do best and have done for so long, and that is flood control and navigation, and more recently environmental enhancement.

It was apparent to us that the Corps was directing their energies and resources to things best left to others, such things as recreation, floodplain management, and regulation of private property rights. We know that part of the blame still lies with the inability of the local people to pay for the new and additional cost-sharing that has been imposed on much-needed, justified, authorized and funded flood control projects since 1986.

We still do not have the proper solution to the ability-to-pay provision that Congress continues to request, therefore numerous projects are not being implemented as directed by the Congress simply because the local interests do not have the money. The Corps of Engineers this past fiscal year did what they have always done, they recognized the problem and they rectified it. Maybe too well.

Today the Corps is faced with a shortfall of funds in all categories and projects. We are, of course, principally concerned with the Mississippi River and Tributaries Project where the total shortfall amounts to over $33 million. This shortfall has created serious program execution problems for this year with new contract awards being frozen and a strong possibility of shutdowns on ongoing work. Unless the Congress increases appropriations in fiscal year 1997 and beyond, these funding problems will continue and the Mississippi River and Tributaries Project will be jeopardized.

One of the reasons for this shortfall of funds is the large, unexpected need to divert civil works funds for natural disaster recovery in several parts of the United States. Had the dictates of Congress been followed more closely in years past and a Federal flood control system been in place, then much of the funds used for relief and recovery would not have been necessary.

It is a proven fact that flood control improvements, while apparently costly at the outset, are a Federal interest without regard to State or local boundaries, are essential to the health and welfare of our Nation, and they pay for themselves many times over in prevention of loss of life and property damage. For every $1 invested, more than $10 of flood damage has been prevented. That is a wonderful investment.

We still firmly believe that the citizens of this great Nation are entitled to the best protection from floods our Nation is capable of devising. We would respectfully request that this committee consider that during its deliberation of the Corps of Engineers' fiscal year 1997 appropriations.

Each one of us realizes only too well that the financial situation of our great Nation needs to be improved and each of us knows that our government's involvement in proven flood control and navigation projects is an investment in the future and must be continued.

Again we urge the Congress to prevent the encroachment by the executive branch upon their policy-making powers. We call attention to the fact that the National Water Resource Development program has historically been operated upon policies legislated by the Congress, and that its significant achievements have been accomplished under this procedure.

From bitter experience we have learned that the control of floods cannot be successfully prosecuted under the ground rules which are currently advocated by the Office of Management and Budget. Flood waters do not recognize partnership arrangements, State lines or political subdivisions. We hope that Congress will reassert its dominance in the field of water resource development.

Mr. Chairman, I promised earlier that we would recommend some dollar amounts for the Mississippi River and Tributaries Project that we hope will be used by the committee during its future deliberations. For many years we have expressed our conviction that an annual appropriation of $400 million was needed in order to complete our project in the most economically feasible time frame and assure the earliest realization of the benefits.

Today, we are all aware of the fiscal problems facing the Nation and we endorse, in principle, the effort to economize and improve our financial picture, but we cannot agree that these objectives can best be accomplished by ignoring the economic lifeblood of our own people and unnecessarily risking our lives and property.

With all these facts well-known, we request that this committee appropriate for the Mississippi River and Tributaries Project in fiscal year 1997 an amount no less than $350 million.

Mr. Chairman, I wish to express for this entire association our sincere appreciation for the many courtesies and the time this subcommittee has given us today and all the past years, and we express the hope that for the health and welfare of the great people of this wonderful Nation that we never give up the fight to improve our water resources. To do so would be unthinkable.

With your permission, I would like to present our other witness, Mr. Curtis Patterson from Louisiana.

[The statement of Mr. Solomon follows:]

STATEMENT

BY

MR. DAVID SOLOMON

LOWER MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION

Mr. Chairman and distinguished Members of the Committee, my name is David Solomon and my home is in Helena, Arkansas. I am the President of White River Drainage District of Phillips and Desha Counties, Arkansas, and I also serve as a Member of the Executive Committee of the Lower Mississippi Valley Flood Control Association and I appear here as spokesman for that Association to present their views on the Fiscal Year 1997 Budget for the Mississippi River and Tributaries Project.

The Lower Mississippi Valley Flood Control Association represents practically all of the levee and drainage districts, municipalities, port and harbor commissions and other state agencies in the Lower Mississippi Valley, extending from the vicinity of Hannibal, Missouri to the Gulf of Mexico. These Organizations and Agencies are political subdivisions of the various States in which they are organized and function: The States of Illinois, Missouri, Kentucky, Tennessee, Mississippi, Arkansas and Louisiana. We have appeared before this Committee for well over sixty years in order to provide the Congress with data to justify adequate Appropriations to complete the Mississippi River and Tributaries project as quickly as possible. Briefly stated we are the Agency that provides the means for all the people of our great Valley to speak and act jointly on all flood control, bank stabilization, navigation and major drainage problems.

The Lower Mississippi Valley Flood Control Association was first organized in 1922. Our 130 member organizations include levee boards, drainage districts, port authorities, harbor commissions, state agencies, municipalities and also just individuals that share our problems and concerns. Those problems address themselves to flood control, navigation, channel improvements and major drainage in the seven states of the alluvial valley of the Lower Mississippi River and I think more importantly our concerns are for the welfare and prosperity of this great nation of ours.

Our Association is comprised of a very large group of individuals who are businessmen, property owners, conservationists, farmers, attorneys, doctors, wildlife enthusiasts, engineers, accountants, environmentalists, civil servants and elected officials from all political parties.

Our Objectives simply stated are:

To seek Congressional authorization for, and adequate annual appropriations for the early completion of all flood control projects necessary for the protection of the Lower Mississippi Valley against the maximum probable flood.

To secure prompt initiation of, and early completion of existing projects for the stabilization of the banks of the Lower Mississippi River, in order to assure the integrity of the Main River Levee System; to provide increased flood discharge capacity, permanency of location for harbor facilities and industrial sites, and to obtain deeper and more reliable navigation channels.

To support channel and major drainage improvements throughout the Lower Mississippi Valley to provide protection against headwater flooding, and to provide adequate outlets for local and state drainage projects.

To cooperate in every proper way with the Department of the Army, the Chief of Engineers of the United States Army, the Mississippi River Commission and other agencies to hasten the accomplishment of flood control in the Mississippi Valley.

We come before you again this year in support of the Mississippi River and Tributaries Project which was established by the Flood Control Act of 1928.

Our Executive Committee is composed of business and professional men representing each of the seven states within the Valley. They are men of wide experience in business, professional and civic life. They are mature in their judgment and responsible in their actions. It, therefore, has been no easy task for that Committee to arrive at an asking figure based on urgent needs and yet tempered in the light of the grave fiscal problems which face the Federal Government. I say these things to emphasize that our asking was not arrived at by whim and fancy.

For over sixty years the Executive Committee of the Lower Mississippi Valley Flood Control Association has closely examined the budget as submitted for the Mississippi River and Tributaries Project prior to testifying before this Sub-Committee. This year marks the first time in that span of years that we have come before you without knowledge of what will be included in the budget for Fiscal Year 1997.

Mr. Chairman even though we cannot discuss specific numbers for the Mississippi River and Tributaries Project today we do have serious problems that relate to both our project and this Nation as a whole that we feel must be discussed.

We are deeply appreciative of this opportunity to appear before this Sub-Committee today. We are a month earlier than our normal schedule but as you can see we have our usual large crowd with us representing all seven states of the Lower Mississippi Valley.

I and many others in this crowd have appeared before this Committee for more years than we like to remember. Today, even though we are pleased to be here it is a sad day for us. Mr. Chairman it is most difficult to comprehend that neither you nor Mr. Bevill will be on this Committee after this year. You both have been not only kind and considerate over the years but you have also been knowledgeable of our needs and generous in your allowances. Most of all, and what will be missed most, is the fact that you both have been strong personal friends and we hope that never ends.

Now let me return to a brief discussion of the problems I mentioned earlier. Mr. Chairman I do promise to recommend some dollar amounts that we hope will be used when this committee initiates its discussions on the Fiscal Year 1997 appropriations.

Last year we discussed with you the serious problem that the Corps of Engineers had experienced with their inability of expending the funds appropriated to them for at least two years.

We as the local sponsor and partner of the Corps of Engineers felt that at least part of the blame for that problem could be attributed to the Corps' recent movement away from the things they do best and have done so well for so long and that's flood control and navigation and more recently environmental enhancement. It was apparent to us that the Corps was directing their energies and resources to things best left to others, such things as recreation, floodplain management and regulation of private property rights. We know that part of the blame still lies with the inability of the local people to pay for the new and additional cost-sharing that has been imposed on much needed, justified, authorized and funded flood control projects since 1986. We still do not have the proper solution to the Ability-to-Pay provision that Congress continues to request. Therefore numerous projects are not being implemented as directed by the Congress simply because the local interests do not have the money.

The Corps of Engineers this past fiscal year did what they always have done. They recognized the problem and they rectified it. Maybe too well!

Today the Corps is faced with a shortfall of funds in all categories and projects. We are, of course, principally concerned with the Mississippi River and Tributaries project where the total shortfall amounts to over 33 million dollars. This shortfall has created serious program execution problems for this year with new contract awards being frozen and a strong possibility of shut-downs of on-going work. Unless the Congress increases appropriations in fiscal 1997 and beyond, these funding problems will continue and the Mississippi River and Tributaries project will be jeopardized.

One of the reasons for this shortfall of funds is the large, unexpected need to divert Civil Works funds for natural disaster recovery in several parts of the United States. Had the dictates of the Congress been followed more closely in years past and a Federal flood control system been in place then much of the funds used for relief and recovery would not have been necessary.

It is a proven fact that flood control improvements, while apparently costly at the outset, are a Federal interest without regard to state or local boundaries; are essential to the health and welfare of our nation; and they pay for themselves many times over in prevention of loss of life and property damage. For every $1.00 invested more than $10.00 of flood damage has been prevented. That's a wonderful investment.

We still firmly believe that the citizens of this great Nation are entitled to the best protection from floods our Nation is capable of devising. We would respectfully request that this Committee consider that during its deliberations of the Corps of Engineer's Fiscal Year 1997 Appropriations.

Each one of us realizes only too well that the financial situation of our great Nation needs to be improved and each of us knows that our government's involvement in proven flood control and navigation projects is an investment in the future and must be continued.

Again we urge the Congress to prevent the encroachment by the Executive Branch upon their policy-making powers. We call attention to the fact that the National Water Resource Development Program has historically been operated upon policies legislated by the Congress and that its significant achievements have been accomplished under this procedure. From bitter experience we have learned that the control of floods cannot be successfully prosecuted under the ground rules which are currently advocated by the Office of Management and Budget. Flood waters do not recognize partnership arrangements, state lines or political subdivision. We hope that Congress will re-assert its dominance in the field of water resource development.

Mr. Chairman I promised earlier that we would recommend some dollar amounts for the Mississippi River and Tributaries project that we hope will be used by the Committee during its future deliberations. For many years we have expressed our conviction that an annual appropriation of 400 million dollars was needed in order to complete our project in the most economically feasible time frame and assure the earliest realization of the benefits.

Today, we are all aware of the fiscal problems facing the Nation and we endorse, in principle, the effort to economize and improve our financial picture but we cannot agree that these objectives can best be accomplished by ignoring the economic lifeblood of our own people and unnecessarily risking our lives and property.

With all these facts well known, we request that this Committee appropriate for the Mississippi River and Tributaries project in Fiscal Year 1997 an amount no less than 350 million dollars.

Mr. Chairman, I wish to express for this entire Association our sincere appreciation for the many courtesies and the time this subcommittee has given us today and all the past years, and we express the hope that for the health and welfare of the great people of this wonderful Nation that we never give up the fight to improve our water resources. To do so would be unthinkable.

With your permission I would like to present our other witness, Mr. Curtis Patterson from Louisiana.

Mr. MYERS. Curtis.

Mr. PATTERSON. Thank you, Mr. Chairman and other distinguished Members of the subcommittee and distinguished guests. I am Curt Patterson, Director of Public Works and Flood Control, which operates under the Department of Transportation and Development in the State of Louisiana. I am also Secretary and Treasurer to the Association of Levee Boards in Louisiana and on the Executive Committee for the Lower Mississippi Valley Flood Control Association.

My comments today summarize the written brief submitted on behalf of the State of Louisiana, the Department of Transportation Development, and the 23 member agencies making up the Association of Levee Boards in Louisiana.

We usually make a statement at this point in our testimony supporting in general the budget allowance being proposed by the administration for the Mississippi River and Tributaries Project, but since the budget is yet to be released we request that you at least consider funding the Corps to its full capabilities.

This is especially necessary for flood control projects in Louisiana due to our geographic position at the lower end of the Mississippi River and the enormous area of the alluvial valleys and floodplains, both in length and width, that make up the total area of other our great State.

Let me explain. I have given you some of these statistics before, and I will give you a few more to go with them this time to let you see what the full impact of flood control means to Louisiana.

Louisiana contains that terminus of the Mississippi River, which has the third largest drainage basin in the world, exceeded only by the watersheds of the Amazon and the Congo Rivers. The Mississippi drains 41 percent, or 1.25 million square miles, of the contiguous United States and parts of two Canadian provinces.

In addition to the Mississippi River system, Louisiana contends with other interstate waters: The Sabine River on the central western border enters from Texas, the Red River enters at the northwest corner coming from four other States, the Ouachita River in the central area flows down from Arkansas, the Amite River in the southeastern area flows down from Mississippi, and the Pearl River on the extreme eastern border flows down from Mississippi as well. All of these systems converge towards Louisiana, passing on to the Gulf of Mexico and draining a figure approaching nearly 50 percent of the contiguous 48 States. To say we have a problem, I believe, is an understatement.

Every time acreage is cleared for development, or drainage is improved within these extensive river systems, the runoff rate is altered and we in Louisiana have to contend with more water. We are doing this in partnership with the Federal Government through the U.S. Army Corps of Engineers.

We can ill afford a slowdown in the Federal assistance for flood control. Nearly one-third of the State is habitable year-round only because it is protected by a flood control system. The importance of this system to the overall economic development of Louisiana becomes readily apparent considering that in the areas protected by the levees live 75 percent of the population, which produces about 90 percent of the State's disposable personal income, and almost 60 percent of the State's agricultural products come from areas protected by levees.

Louisiana also plays a strategic part in providing the country with access to world markets through an inland navigation system that funnels through Louisiana. Approximately 76 percent of all soybeans, animal feed and corn grown in the U.S. is shipped through Louisiana and almost 50 percent of all rice and cereals. Louisiana has the highest waterborne traffic, by State. The petrochemical industry depends almost totally on the federally constructed levee systems and the maintained navigation depths of the rivers.

The river flood control systems work in conjunction with the hurricane protection and coastal protection systems to form a totally integrated protection system from floods of all types. This integrated system protects the inland navigation system that, as Senator Bond has said, is the envy of the world. It also protects the petrochemical industry in Louisiana, which has the second largest refining capacity in the country, producing about 15 billion gallons of gasoline at 19 refineries.

Louisiana ranks second in produced natural gas and third for oil production. The pipeline system which supplies much of the country with natural gas and petroleum originates in Louisiana. These industries not only depend almost totally on the federally constructed levee systems to protect them from floods and hurricanes, but also depend on the federally constructed and maintained navigation system for transportation.

This infrastructure development, which benefits the entire country, has contributed to the destruction of our marshes and wetlands, which produce commercial fish and shellfish harvest worth over $600 million and 40 percent of the Nation's wild fur and hide harvest worth over $15 million.

This wealth of natural resources cannot survive and propagate for the economic benefit of the State and Nation without onshore facilities that require protection from major storms and hurricanes. The eroding shoreline is exposing oil and gas pipelines, creating a dangerous situation. It would be a national loss if these facilities and infrastructure were not protected, since Louisiana plays such a strategic part in the overall national economy.

But Louisiana alone cannot support this infrastructure on which the country depends. All these facilities in Louisiana that support and contribute to the economic well-being of the country are protected by flood control measures, flood control measures that the Federal Government has appropriately committed itself to provide.

Specifically, we are interested in seeing the completion of the Mississippi River and tributaries project. This includes the Mississippi River and those tributaries of the Mississippi, such as the Atchafalaya Basin, Tensas Basin, and a portion of the Lower Red River.

We are also interested in maintaining the integrity of the flood control features of the Red River and the Ouachita and Black Rivers. This is our main line of defense, without which most of the rest of the floods control projects would not be nearly as effective. Continued funding to the full capability of the Corps of Engineers is vitally needed, and your consideration in providing such will be much appreciated.

The most critical reach of the mainline Mississippi River levees are within the Fifth Louisiana Levee District in northeast Louisiana. Raising these levees requires purchasing additional rights-of-way, which is a local responsibility. However, the Fifth Louisiana Levee District is located within an area of the State which is economically depressed and has an over-20 percent unemployment rate.

On behalf of the levee district, which could not afford even to be here with you today, I present their request that Federal funding be provided to cover the cost and purchase of rights-of-way. The levee district's tax base covers only the cost of maintaining the levee systems.

If we experience a project flood, Louisiana will be in jeopardy. In 1927, a levee crevasse occurred in this area, flooding millions of acres east of the Mississippi River down to the Gulf of Mexico and across the Acadiana parishes. As the song goes, there was six feet of water in Evangeline. We are not talking about a small matter. The amount of deficiency in levee heights averages four to seven feet, and contrary to popular belief, the Mississippi River and tributaries is not complete in Louisiana.

The Federal funds for work under way in the Fifth Louisiana Levee District have just been reprogrammed to other projects. Considering the condition of these mainline levees, we respectfully request that funds be restored so that the work can continue on schedule.

The Red River Waterway Navigation Project is now open to navigation, but continued funding is needed to complete the remainder of the project items. You have been very generous in providing funds to advance this project, and we thank you for that. We support the testimony being presented before you later today on this project by the Red River Waterway Commission and the Red River Valley Association. We urge your continued support in this effort.

The passage of the Coastal Wetlands Planning, Protection and Restoration Act has been a positive force in Louisiana. This legislation is not only assisting the Nation and Louisiana in protecting and restoring precious wetlands of national significance, but it has also freed up Corps' funds for other much-needed flood control and navigation projects.

The topography of Louisiana's coastline makes it very vulnerable to hurricanes and coastal storms and presents a danger to the people of the area. The hurricane protection projects already under construction, such as Lake Pontchartrain and Vicinity, and the Westwego to Harvery Canal, as well as those currently waiting for authorization, such as the West Bank-East of Harvey Canal, Louisiana, the Lake Cataouatche levees across from New Orleans, and one currently under study, Morganza, Louisiana to the Gulf of Mexico, need to be funded so these projects can move along toward completion, thereby providing the protection so desperately needed in these economically productive areas.

Another authorized project that concerns us in Louisiana is the Louisiana Penitentiary Levee which was authorized under the Mississippi River and Tributaries Project in 1986 and reauthorized in

1990. We urge your support in funding this project and request that specific language be included in the appropriations bill to direct the Secretary of the Army to construct this project.

We thank Congress for rejecting the administration's proposed policy changes with respect to the Corps' participation in flood control and hurricane protection. That policy change would have been devastating to the State of Louisiana. The continuation of the existing programs, including the continuing authorities, benefit the Nation, and we urge your continued support in keeping past commitments.

There are many other projects we would like to call to your attention, but in the interest of time, we will refer you to our written brief that has been turned in for the record. We will appreciate your consideration of these critical program needs and assure you that the State of Louisiana will honor its agreements. Thank you again for the opportunity to appear before you today and express to you the needs of the State of Louisiana.

[The statement of Mr. Patterson follows:]

ORAL STATEMENT

PRESENTED TO

APPROPRIATIONS SUBCOMMITTEES

ON

ENERGY AND WATER DEVELOPMENT

SENATE SUBCOMMITTEE - FEBRUARY 27, 1996
AND
HOUSE SUBCOMMITTEE - FEBRUARY 27, 1996

ON BEHALF OF
THE STATE OF LOUISIANA

MURPHY J. "MIKE" FOSTER, GOVERNOR

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
FRANK M. DENTON, SECRETARY

BY

CURTIS G. PATTERSON
DIRECTOR
PUBLIC WORKS AND FLOOD CONTROL DIRECTORATE

Mr. Chairman and other distinguished members of the Subcommittee and your distinguished guests, I am Curtis Patterson, Director of Public Works and Flood Control, Department of Transportation and Development, State of Louisiana. My comments today summarize the written briefs submitted on behalf of the State of Louisiana, its Department of Transportation and Development, and the twenty-three member agencies making up the Association of Levee Boards of Louisiana.

We usually make a statement at this point in our testimony supporting, in general, the budget allowance being proposed by the Administration for the Mississippi River and Tributaries Project. But, since the budget has yet to be released we request that you consider funding the Corps to its full capabilities. This is especially necessary for flood control projects in Louisiana due to our geographic position at the lower end of the Mississippi River and the enormous area of the alluvial valleys and flood plains, both in length and width, that make up the total area of our great State.

Let me explain. . . .

Louisiana contains the terminus of the Mississippi River, which has the third largest drainage basin in the world, exceeded only by the watersheds of the Amazon and the Congo Rivers. The Mississippi drains 41 percent, or 1-1/4 million square miles, of the contiguous United States and parts of two Canadian provinces. In addition to the Mississippi River system, Louisiana contends with other interstate waters. The Sabine on the central western border entering from Texas, the Red River entering at its northwest corner coming from four other states, the Ouachita River in the north central area flowing down from Arkansas, the Amite River in the southeast area flowing down from Mississippi, and the Pearl River on the extreme eastern border with Mississippi. All of these systems converge towards Louisiana, passing on to the Gulf of Mexico, draining a figure approaching 50 percent of these contiguous 48 states.

Every time acreage is cleared for development or drainage is improved within these extensive river basins, the runoff rate is altered and we in Louisiana have to contend with more water. And we are doing it in partnership with the Federal Government and the Corps of Engineers. We can ill afford a slow down in the Federal assistance for flood control. Nearly 1/3 of the state is habitable year-round only because it is protected by a flood control system. The importance of this system to the overall economic development of Louisiana becomes readily apparent considering that in the areas protected by levees live 75% of the population which produces about 90% of the state's disposable personal income. Also about 60% of the state's agricultural products come from areas protected by levees.

Louisiana also plays a strategic part in providing the country with access to world markets through an inland navigation system that funnels through Louisiana. Approximately 76% of all soybeans, animal feed, and corn grown in the U.S. is shipped through Louisiana, and almost 50% of all rice and cereals. Louisiana has the highest waterborne traffic by state. The petrochemical industry depends almost totally on the Federally constructed levee system and the maintained navigation depths of the rivers. The river flood control systems work in conjunction with the hurricane protection and coastal protection systems to form a total integrated protection system from floods of all types. This integrated system protects the inland navigation system that as Senator Bond has said, "is the envy of the world." It also protects the petrochemical industry in Louisiana which has the second largest refining capacity in the country producing approximately 15 billion gallons of gasoline at 19 refineries. Louisiana ranks second in produced natural gas and third for oil production. The pipeline system which supplies much of the country with natural gas and petroleum originates in Louisiana. These industries not only depend almost totally on the Federally constructed levee systems to protect them from floods and hurricanes, but also depend on the Federally constructed and maintained navigation system for transportation.

This infrastructure development which benefits the entire country has contributed to the destruction of our marshes and wetlands which produce a commercial fish and shellfish harvest worth over $600 million and 40% of the Nation's wild fur and hides harvest worth over $15 million. This wealth of natural resources cannot survive and propagate for the economic benefit of the State and Nation without on-shore facilities that require protection from major storms and hurricanes. The eroding shoreline is exposing oil and gas pipelines creating a dangerous situation. It would be a national loss if these facilities and infrastructure were not protected since Louisiana plays a strategic part in the national economy.

But Louisiana alone cannot support this infrastructure on which the country depends. All these facilities in Louisiana that support and contribute to the economic well being of the country are protected by flood control measures; flood control measures that the Federal Government has appropriately committed itself to provide.

Specifically, we are interested is seeing the completion of the Mississippi River and Tributaries

Project. This includes the Mississippi River and those tributaries of the Mississippi River such as the Atchafalaya Basin, Tensas Basin and a portion of the Lower Red River. And we are also interested in maintaining the integrity of the flood control features of the Red River and Ouachita and Black Rivers. This is our main line of defense, without which, most of the rest of our flood control projects would not be nearly as effective. Continued funding to the full capability of the Corps of Engineers is vitally needed, and your consideration in providing such will be much appreciated.

The most critical reach of the main-line Mississippi River levees are within the Fifth Louisiana Levee District. Raising these levees requires purchasing additional rights-of-way which is a local responsibility. However, the Fifth Louisiana Levee District is located within an area of the State which is economically depressed and has close to a 20% unemployment rate. On behalf of the Levee District, which could not afford to be here today, I present their request that Federal funding be provided to cover the cost to purchase these rights-of-way. The Levee District's tax base covers only the cost of maintaining these levees. If we experience a project flood, Louisiana will be in jeopardy. In 1927 a levee crevasse occurred in this area flooding millions of acres east of the Mississippi River down to the Gulf of Mexico across Acadiana. As the song goes, "there was 6 feet of water in Evangeline." We are not talking about a small matter. The amount of deficiency in levee heights averages 4 to 7 feet. Contrary to popular belief, the Mississippi River and Tributaries Project is not complete in Louisiana!

The funds for work underway in the Fifth Louisiana Levee District have just been reprogrammed to other projects. Considering the condition of these main-line levees , we respectfully request that the funds be restored so that the work can continue on schedule.

The Red River Waterway Navigation Project is now open to navigation, but continued funding is needed to complete the remainder of project items. You have been very generous in providing funds to advance this project and we thank you. We support the testimony being presented before you today on this project by the Red River Waterway Commission and the Red River Valley Association. We urge your continued support in this effort.

The passage of the Coastal Wetlands Planning, Protection and Restoration Act has been a positive force for Louisiana. This legislation is not only assisting the Nation and Louisiana in protecting and restoring precious wetlands of National significance but it has also freed up Corps' funds for other much needed flood control and navigation projects.

The topography of Louisiana's coastline makes it very vulnerable to hurricanes and coastal storms and presents a danger to the people of the area. The hurricane protection projects already under construction, such as Lake Pontchartrain and Vicinity and the Westwego to Harvery Canal, as well as those currently waiting for authorization, such as the West Bank - East of Harvey Canal, LA; the Lake Cataouatche levees (across the river from New Orleans); and one currently under study, the Morganza, LA to the Gulf of Mexico, need to be funded so these projects can move along toward completion, thereby providing the protection so desperately needed in these economically productive areas.

Another authorized project that concerns us is the Louisiana Penitentiary Levee which was authorized under the Mississippi River and Tributaries Project in 1986 and re-authorized in 1990. We urge your support in funding this project and request that specific language be included in the appropriations bill to direct the Secretary of the Army to construct this project.

We thank Congress for rejecting the Administration's proposed policy changes with respect to the Corps' participation in flood control and hurricane protection. That policy change would have been devastating to Louisiana. The continuation of the existing programs, including the Continuing Authorities, benefit the Nation and we urge your continued support in keeping past commitments.

There are many other projects we would like to call to your attention, but in the interest of time, we will refer you to our written brief submitted for the record. We will appreciate your consideration of these critical program needs and assure you that the State of Louisiana will honor its agreements. Thank you for allowing us this opportunity to discuss them with you today.

STATEMENT BY
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT PUBLIC WORKS AND FLOOD CONTROL DIRECTORATE RECOMMENDING FISCAL YEAR 1997 APPROPRIATIONS

FLOOD CONTROL, NAVIGATION, HURRICANE PROTECTION AND WATER RESOURCES PROJECTS IN LOUISIANA

PRESENTED TO: APPROPRIATIONS SUBCOMMITTEES ON ENERGY AND WATER DEVELOPMENT
SENATE - FEBRUARY 27, 1996
AND
HOUSE OF REPRESENTATIVES - FEBRUARY 27, 1996

The Louisiana Department of Transportation and Development, Public Works and Flood Control Directorate, is the agency designated to represent the State of Louisiana for the coordinated planning and development of water resources, including flood control, navigation, drainage, water conservation and irrigation projects; therefore, this statement is presented on behalf of the State of Louisiana. We are pleased to present the recommendations for Fiscal Year 1997 appropriations for Louisiana projects. The projects listed herein are separate from those in the statement by the Public Works and Flood Control Directorate on the Mississippi River and Tributaries Project.

The effect of the Administration's water development policy changes which were rejected by Congress last year are still being felt across the country. We have relied on the U.S. Army Corps of Engineers to assist us with flood control and navigation for the collective good of the country. The system approach developed by the Corps for flood control and navigation is working. River systems do not recognize political boundaries. Weather systems do not recognize political boundaries. We have many projects underway with the Crops but we are concerned that these commitments may be voided. Reducing the Corps' responsibility in these matters after commitments have been made by previous congresses is tantamount to unfunded mandates and will affect the State of Louisiana and the Nation negatively. We offer the following as support of our cause.

Louisiana contains the terminus of the Mississippi River, which has the third largest drainage basin in the world, exceeded only by the watersheds of the Amazon and the Congo Rivers. The Mississippi drains 41 percent, or 1 1/4 million square miles, of the contiguous United States and parts of two Canadian provinces. In addition to the Mississippi River system, Louisiana contends with other interstate waters - the Sabine on the western border, the Red River from four other states, the Ouachita River in the north central area flowing down from Arkansas, the Amite River in southeast area flowing down from Mississippi, and the Pearl River on its extreme eastern border with Mississippi. All of these systems converge towards Louisiana, passing on to the Gulf of Mexico, draining a figure approach 50% of these contiguous 48 states.

Louisiana also plays a strategic part in providing the country with access to world markets through an inland navigation system that funnels through Louisiana. Approximately 75% of all soybeans, animal feed, and corn grown in the U.S. are shipped through Louisiana. And almost 50% of all rice and cereals. Louisiana has the highest waterborne traffic by state. The petrochemical industry depends almost totally on the Federally constructed levee system and the maintained navigation depths of the river. The river flood control systems work in conjunction with the hurricane and coastal protection systems to form a total integrated protection system from floods of all types. This integrated system protects the inland navigation system that as Senator Bond has said "is the envy of the world." It also protects the petrochemical industry in Louisiana which has the second largest refining capacity in the country producing approximately 15 billion gallons of gasoline at 19 refineries. Louisiana ranks second in produced natural gas and third for oil production. The pipeline system which supplies much of the country with natural gas and petroleum originates in Louisiana. The petrochemical and oil and gas industries depend almost totally on Federally constructed levee systems to protect them from floods and hurricanes, and depend on the navigation system for transportation. This infrastructure development which benefits the entire country has contributed to the destruction of our marshes and wetlands which produce a commercial fish and shellfish harvest worth over $600 million and 40% of the Nation's wild fur and hides harvest worth over $15 million. This wealth of natural resources cannot survive and propagate for the economic benefit of the State and Nation without on-shore facilities that require protection from major storms and hurricanes. It would be a national loss if these facilities and infrastructure were not protected since Louisiana plays a strategic part in the national economy. But Louisiana alone cannot support the infrastructure on which the country depends. All these facilities in Louisiana that support and contribute to the economic well being of the country are protected by flood control measures; flood control measures that the Federal Government has appropriately committed itself to provide.

In making the following recommendations regarding construction, studies and some selected operation and maintenance items, the State of Louisiana understands the Administration's need to reduce the Federal deficit, but would hope that Congress and the Administration will honor their prior commitments to infrastructure development and fund our requests. We feel that water resources projects are probably the most worthwhile and cost effective projects in the Federal budget, having to meet stringent economic justification criteria not required of other programs. We ask that this be taken into consideration in the final decision making process to appropriate the available funds.

PROJECT		LOUISIANA REQUEST
Authorized Studies		
Black Bayou Diversion, LA	$	351,000
Calcasieu River at Hackberry, LA	$	140,000
Intracoastal Waterway Locks, LA	$	900,000
Jefferson Parish, LA	$	700,000
Lafayette Parish, LA	$	624,000
Mississippi River Ship Channel, LA	$	778,000
Orleans Parish, LA	$	740,000
St. Tammany Parish, LA	$	150,000
West Shore - Lake Pontchartrain, LA	$	129,000
Preconstruction Engineering and Design		
Comite River Diversion, LA	$	800,000
East Baton Rouge Parish, LA	$	400,000
Port Fourchon, LA	$	300,000
West Bank - East of Harvey Canal, LA	$	1,000,000
Construction		
Aloha-Rigolette Area, Red River, LA	$	1,800,000
Cat Island Revetment, Red River, LA	$	3,900,000
Lake Pontchartrain and Vicinity, Hurricane Protection		Full Capability of Corps
Larose to Golden Meadow, Hurricane Protection	$	2,000,000
Mississippi River, Gulf Outlet		Full Capability of Corps
Mississippi River Ship Channel, LA	$	3,500,000
New Orleans to Venice, Hurricane Protection		Full Capability of Corps
Ouachita River Levees	$	100,000
Red River Chloride Control		Full Capability of Corps
Red River Waterway, LA	$	17,000,000
Southeast Louisiana Urban Flood Control	$	18,000,000
Westwego to Harvey Canal, LA, Hurricane Protection	$	7,000,000

OPERATION AND MAINTENANCE Request: Full Capability

Operation and maintenance of completed projects is essential to achieving the full benefits of the projects. In times of budget constraints it is essential that operation and maintenance not be put off which would hamper the effectiveness of the projects and cause more expensive maintenance at a later date. We urge you to continue funding operation and maintenance to the Corps' full capability.

OUACHITA RIVER LEVEES Request: $ 100,000

The culvert replacement in the Ouachita River Levees will be completed this fiscal year. We thank you for your assistance in this desperately needed work. What remains is to bring the levees up to standards. We request that specific language be added to the appropriations bill to direct the Secretary of the Army to accomplish this task by raising the levees and surfacing the crown. We request that $100,000 be provided in Fiscal Year 1997 for this work.

MISSISSIPPI RIVER SHIP CHANNEL, GULF TO BATON ROUGE, LA
Request: $ 3,500,000

The Mississippi River Ship Channel is now capable of providing a 45 foot deep channel all the way to Baton Rouge, Louisiana. The Phase I mitigation construction is underway and we request an appropriation to keep it on schedule, and to continue the design memorandum for the remaining Phase III features. We thank you for your continued support for infrastructure development which keeps our country competitive in the world market.

EAST BATON ROUGE PARISH, LA Request: $ 400,000

The East Baton Rouge Parish Tributaries Project is designed to reduce flooding in five watersheds of the capital city of Baton Rouge, La. During the flood of record in 1983, East Baton Rouge Parish experienced flood damages estimated at $65 million. The Parish will be the local sponsor for this project which has a benefit to cost ratio of over 2 to 1. The funds requested will continue preconstruction engineering and design.

LAFAYETTE PARISH, LA Request: $ 624,000

Flooding from the Vermilion River in Lafayette Parish in 1993, and since, has caused damages to areas that had never flooded before. The feasibility study will begin this fiscal year and the funds requested are to continue the much needed study. The Parish has contributed funds to get the study underway as promptly as possible.

WESTWEGO TO HARVEY CANAL, LA Request: $ 7,000,000

Hurricane protection for the West Bank of the New Orleans metropolitan area is urgently needed We urge the Corps to increase its capability for an accelerated construction schedule for this project. A Post Authorization Change Report is under review within the Corps to determine the feasibility of incorporating the Lake Cataouatche Levee into the project. This would extend hurricane protection west to the St. Charles Parish line. We urge your support for this addition.

WEST BANK - EAST OF HARVEY CANAL, LA Request: $ 1,000,000

The East of Harvey Hurricane Protection Project will modify the Westwego to Harvey Canal Project now under construction and provide greater net benefits realized than from the Westwego to Harvey Canal Project alone. This project will protect over 80% of residential structures in the area, which is a potential flood damage reduction of over $2.2 million and has a benefit to cost ratio of 4 to 1. We urge your support for this project and its early authorization.

ALOHA-RIGOLETTE AREA, RED RIVER, LA Request: $ 1,800,000

Construction of this much needed project has begun, but at a reduced construction schedule due to budget cuts. We urge your support for funds to put this project back on schedule.

RED RIVER WATERWAY - MISSISSIPPI RIVER TO SHREVEPORT, LA
Request: $ 17,000,000

Navigation is now possible to Shreveport, however the project still has many additional items to complete. The accelerated construction schedule mandated by your funding recommendations in previous years, we feel, has saved taxpayers of the United States millions of dollars on the construction of the Red River Waterway Project. We urge the continuation of this policy by providing $17 million for Fiscal Year 1997 based on the previously approved schedule.

CAT ISLAND REVETMENT, LA Request: $ 3,900,000

Cat Island Revetment along the Red River has become an emergency situation threatening the levee. We request that specific language and funds be included in the appropriations bill directing the Secretary of the Army to construct this much needed revetment at Cat Island under authorization of the Red River Emergency Bank Protection Program.

TWELVE MILE BAYOU REVETMENT, LA Request: $ 600,000

The revetment along Twelve Mile Bayou at Shreveport is threatening Highway 3049. Repair of this revetment is urgently needed and we request specific language and funds be included in the appropriations bill directing the Secretary of the Army to correct this situation.

RED RIVER BASIN CHLORIDE CONTROL PROJECT Request: Full Capability

With the Red River Waterway Project bringing navigation to Shreveport, the water supply needs of the area will increase. Reducing the chloride content of the Red River, which is technically and economically feasible, would make the Red River usable as an economical water supply. The construction of the Red River Chloride Control Project will enhance further economic development in the Red River Valley and make the Navigation Project prove even more economically feasible than previously anticipated. We ask that funds continue to be provided in future years until this project is completed.

COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

The passage of the Coastal Wetlands Planning, Protection and Restoration Act has been a positive force for Louisiana. This legislation is not only assisting the Nation and Louisiana in protecting and restoring precious wetlands of national significance but it has also freed up Corps' funds for other much needed flood control and navigation projects.

The State of Louisiana commends the Corps on its cooperation in coordinating the beneficial use of dredged material for coastal preservation.

CONCLUSION

We wish to express our thanks to the Appropriations Subcommittees on Energy and Water Development of the House and Senate for allowing us to present this brief on the needs of Louisiana. Without reservation, practically every single project in Louisiana which has been made possible through actions of these committees has shown a return in benefits many times in excess of that contemplated by the authorizing legislation. The projects which you fund affect the economy of not only Louisiana, but the nation as a whole. The State of Louisiana appreciates the accomplishments of the past and solicits your consideration of the appropriations requested for Fiscal Year 1997

SUBMITTED BY

STATE OF LOUISIANA
MURPHY J. "MIKE" FOSTER
GOVERNOR

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
FRANK M. DENTON
SECRETARY

CURTIS G. PATTERSON
DIRECTOR
PUBLIC WORKS AND FLOOD CONTROL DIRECTORATE

WARD S. FILGO
CHIEF
FEDERAL PROJECTS

STATEMENT BY
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT PUBLIC WORKS AND FLOOD CONTROL DIRECTORATE RECOMMENDING FISCAL YEAR 1997 APPROPRIATIONS

MISSISSIPPI RIVER AND TRIBUTARIES PROJECT

PRESENTED TO: APPROPRIATIONS SUBCOMMITTEES ON ENERGY AND WATER DEVELOPMENT

SENATE - FEBRUARY 27, 1996
AND
HOUSE OF REPRESENTATIVES - FEBRUARY 27, 1996

The Louisiana Department of Transportation and Development, Public Works and Flood Control Directorate, is the agency designated to represent the State of Louisiana in the planning and orderly development of its water resources. This statement is presented on behalf of the State of Louisiana and contains recommendations for Fiscal Year 1997 appropriations for Louisiana projects under the Mississippi River and Tributaries Project.

Louisiana contains the terminus of the Mississippi River, which has the third largest drainage basin in the world, exceeded only by the watersheds of the Amazon and Congo Rivers. The Mississippi river drains 41 percent, or 1-1/4 million square miles, of the contiguous United States and parts of two Canadian provinces. All of the runoff from major river basins such as the Missouri and Upper Mississippi, the Ohio including the Tennessee and others, and the Arkansas and White, flow into the Lower Mississippi, which empties into the Gulf of Mexico through Louisiana.

The jurisdiction of levee boards in Louisiana includes one-third of the State's total area. However the importance of this one-third of the State can be seen by the fact that it contains nearly 75 percent of the States's population and about 97 percent of the States's disposable personal income Traditionally, the levee district areas are water rich and have fallen heir to industrial development that ranks high in the nation. It has been estimated that about 60 percent of the State's agricultural products come from levee district areas. So you can see why Louisiana and its twenty levee districts are so interested in seeing the completion of the Mississippi River and Tributaries Project.

In making the following recommendations regarding construction, studies and some selected operation maintenance items, the State of Louisiana understands the Administration's need to reduce the Federal deficit, but would hope that Congress and the Administration will honor their prior commitments to infrastructure development and fund our requests.

MISSISSIPPI RIVER AND TRIBUTARIES
SUMMARY OF RECOMMENDED APPROPRIATIONS

LOUISIANA PROJECTS	LOUISIANA REQUEST
Construction	
Atchafalaya Basin	Full Capability of Corps
Atchafalaya Basin, Floodway System	Full Capability of Corps
Channel Improvements	Full Capability of Corps
Mississippi Delta Region Project, Davis Pond	Full Capability of Corps
Mississippi and Louisiana Estuarine Areas	Full Capability of Corps
Mississippi River Levees	Full Capability of Corps
Tensas Basin, Red River Backwater Area, LA	$ 11,600,000
General Investigations	
Morganza to the Gulf	$ 965,000
Preconstruction, Engineering and Design	
Louisiana State Penitentiary Levee	$ 600,000
Operation and Maintenance	
Atchafalaya Basin	Full Capability of Corps
Atchafalaya Basin, Floodway System, LA	Full Capability of Corps
Baton Rouge Harbor - Devil Swamp, LA	Full Capability of Corps
Bayou Cocodrie and Tributaries	Full Capability of Corps
Bayou Rapides Drainage Structure & Pumping Plant (LRR-SBL)	$ 400,000
Bonnet Carre Spillway	Full Capability of Corps
Channel Improvement	Full capability of Corps
Lower Red River - South Bank Levees	Full Capability of Corps
Mississippi Delta Region, Caernarvon, LA	Full Capability of Corps
Mississippi River Levees	Full Capability of Corps
Old River Control Structure	Full Capability of Corps
Red River Backwater Area	Full Capability of Corps
Tensas Basin, Boeuf & Tensas Rivers, AR, LA	Full Capability of Corps

NOTE: The projects listed above are only those in Louisiana and directly affecting the State. We realize that there are others in these areas, we endorse the recommendations of the Lower Mississippi Valley Flood Control Association.

ATCHAFALAYA BASIN Request: Full Capability

This project is a main stem component of the flood control plan for the Mississippi River and Tributaries Project. The Mississippi River can safely carry only one-half of the project flood, or 1,500,000 cubic feet per second, below Old River; the other 1,500,000 cubic feet per second must be discharged through the Atchafalaya Basin. The levees which must confine this flow to the basin are now deficient because they have settled below original design grade due to consolidation of the underlying soils, and the design has been revised upward. This places the lives and welfare of approximately 650,000 people and their property and improvements in 13 parishes in the immediate vicinity of the Atchafalaya Floodway in jeopardy each flood year. The tax assessment records indicate the value of potential flood losses to be approximately $8 billion, not including public improvements. Over the past half century, we have supported the Mississippi River and Tributaries Project and have agreed that construction of flood protection works should start upstream and progress downstream. As a result, the Mississippi River and Tributaries Project is now more than 90 percent complete in sites upstream from Louisiana while the levees in the Atchafalaya Basin can contain only approximately 90 percent of the project flood. Work on this project has been underway since 1928 and isn't scheduled for completion until the year 2010. We urge your support for funding this effort to the full capability of the Corps.

CHANNEL IMPROVEMENTS Request: Continue construction through completion of all remaining projects - Full Capability

Channel improvements and stabilization provide protection of the levees and the development behind them, as well as preventing unsatisfactory alignment where the river's bank is unstable Below Racetrack, where maintenance dredging is costing about $1 million annually, is a high priority area in Louisiana which needs immediate attention. Therefore, we urge you to fund this Channel Improvement portion of the budget at a level to keep the program moving forward. The funds we are requesting will provide for the dredging and revetment work necessary to accommodate increased flows caused by upstream improvements. It has come to our attention that a funding shortfall exists in this program for 1997. This is the number 2 priority for the State after the levee program. We encourage the Congress to proceed with this vital program. Additionally, we are distressed to learn that the future of the revetment program on the Mississippi River may be in jeopardy. This will be the first time ever in recent history that this vital program would be delayed or possibly terminated if appropriate funding is not provided.

MISSISSIPPI RIVER LEVEES

Request: Full Capability

The Mississippi River and Tributaries Project above Louisiana is 90 percent complete but to a much lesser extent within Louisiana. Because of the improvements upstream, increased flows are a major problem in Louisiana where the project is lagging behind the construction in the upper valley. We request that funds which have been reprogrammed be restored for levee enlargement work where there is a deficiency of 4 to 7 feet of main-line Mississippi River levees within the Fifth Louisiana Levee District, and funds also be restored for the relief wells designed to stop seepage problems. It is also requested that Federal funds be provided to purchase rights-of-way for this critical work as the Levee District is in an economically depressed area and does not have a tax base capable of producing the funds necessary for both maintenance and rights-of-way.

LOUISIANA STATE PENITENTIARY LEVEE

Request: $600,000

The Louisiana State Penitentiary Levee is the only section of Mississippi River levee in Louisiana that is not currently constructed to Federal standards. It was authorized under the Mississippi River and Tributaries Project in 1986 and re-authorized in 1990. We urge support in funding this project and request that specific language be included in the appropriations bill to direct the Secretary of the Army to construct this project before an emergency situation arises during a major river flood.

MORGANZA, LA TO THE GULF OF MEXICO

Request: $965,000

This study area of approximately 4,000 square miles lies in the corridor between the Mississippi and East Atchafalaya Basin Levees and is part of the alluvial floodplain of the Mississippi River. These levees intercepted the drainage which now must flow approximately 125 miles to the Gulf of Mexico. The area is affected by backwater flooding from the Atchafalaya Basin and is also affected by tides. This is a very important project to the State and we urge your continued support for funding. This study is a good first step to identify potential solutions. However, we support expediting a key feature already identified by the Corps, the Houma Navigation Canal lock structure and ask for the Committee's support with authorization and appropriations.

MISSISSIPPI DELTA REGION PROJECT, DAVIS POND

Request: Full Capability

Davis Pond Freshwater Diversion Project is necessary to aid in the fight against coastal erosion and land loss. The State of Louisiana's commitment to this project is demonstrated by our agreement to provide 25 percent of the cost of construction, operation and maintenance of the Davis Pond structure despite Congressional project authorization at 100 percent Federal cost as mitigation for the Mississippi River and Tributaries Project.

BAYOU RAPIDES DRAINAGE STRUCTURE AND PUMPING PLANT

(Lower Red River, South Bank Levees) Request: $400,000

The Bayou Rapides Drainage Structure and Pumping Plant is authorized under the Lower Red River, South Bank Levees of the Mississippi River and Tributaries Project. The report on this project has been approved and the Corps is now ready to begin the design phase. We urge your support in funding this project and request that specific language be included in the appropriations bill to direct the Secretary of the Army to construct this project.

LOCAL CONTRIBUTIONS FOR FLOOD CONTROL IMPROVEMENTS

Historically, Louisiana has always done its part in cooperation with the Federal agencies concerned with flood control. The Louisiana State Board of Engineers, the forerunner of the Department of Transportation and Development, Public Works and Flood Control Directorate, was created in 1879, the same year as the Mississippi River Commission, to coordinate the planning and construction of the required flood control facilities to protect the State. Since that time, local expenditures for flood control have exceeded $730,000,000. This amount adjusted to 1979 dollars represents expenditures in excess of $5.3 billion. Nearly one-half of the potential flooded area of the Lower Mississippi River valley lies in Louisiana. Local expenditures for flood control have increased with the growth of the valley. This record not only meets, but exceeds any National Water Policy local participation requirements ever put into practice.

CONCLUSION

The State of Louisiana, Department of Transportation and Development, Public Works and Flood Control Directorate, in particular, wishes to commend the Appropriations Subcommittees on Energy and Water Development, and express our appreciation for the foresight and understanding exhibited for water resources projects which are vital to the national interest. We solicit your further consideration of the recommendations presented herein.

SUBMITTED BY

STATE OF LOUISIANA
MURPHY J "MIKE" FOSTER
GOVERNOR

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
FRANK M. DENTON
SECRETARY

CURTIS G. PATTERSON
DIRECTOR
PUBLIC WORKS AND FLOOD CONTROL DIRECTORATE

WARD S. FILGO
CHIEF
FEDERAL PROJECTS SECTION

STATEMENT BY

THE FIFTH LOUISIANA LEVEE DISTRICT

222 NORTH CEDAR STREET
TALLULAH, LOUISIANA 71282

RECOMMENDING FISCAL YEAR 1997 APPROPRIATIONS

PRESENTED TO
APPROPRIATIONS SUBCOMMITTEES ON ENERGY
AND WATER DEVELOPMENT

SENATE - FEBRUARY 27, 1996
AND
HOUSE OF REPRESENTATIVES - FEBRUARY 27, 1996

REYNOLD S. MINSKY
PRESIDENT
FIFTH LOUISIANA LEVEE DISTRICT

The Fifth Louisiana Levee District, created in 1886, is responsible for the performance of maintenance, repair, and inspection of 355 miles of levee in northeastern Louisiana. Main-line Mississippi River Levees comprise almost 214 of the miles.

Corps of Engineers funding for the following projects has been diverted to other activities. These projects are of great concern to us and the State of Louisiana:

State Line to Wilson Point, Levee Enlargement, East Carroll Parish, Louisiana

Item 503-R (Station 190+00 to 405+00): Construction for this 4.1-mile portion is scheduled for FY 96. The average deficiency in levee height is 6 feet. The estimated construction cost is $5,901,000 with right-of-way costs estimated to be $368,000.

Item 506-R (Station 0+00 to 190+00): Construction for this 3.6-mile portion was scheduled for FY 96 but was recently moved to FY 97. The average deficiency in levee height is 4.2 feet. The estimated construction cost is $5,262,000 with right-of-way costs estimated to be $270,000. This portion of the project closes the gap between Item 503-R and the levee in southeast Arkansas. The levees in southeast Arkansas have been raised to the 1973 revised grade with the exception of "free board only" provisions.

St. Joseph to Waterproof, Levee Enlargement and Relief Wells, Tensas Parish, Louisiana

Item 379-R: This project currently involves only the installation of relief wells as the levee enlargement portion was deleted. Relief wells are designed to help stop seepage problems from occurring in the area. The Mississippi River does not have to approach a major flood for seepage to become a problem as has been experienced in recent years. This project is the most critical to the Fifth Louisiana Levee District.

It is respectfully requested that funds for these projects be appropriated so that construction may proceed according to schedule. The Fifth Louisiana Levee District is unable to provide funds for right-of-way acquisition and funds for this purpose are also requested to be appropriated. These projects are a necessary part of the Mississippi River and Tributaries Project and are vitally important to providing flood control in the Lower Mississippi Valley.

STATEMENT OF KENNETH L. WEILAND, P.E.

TO THE

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

February 27, 1996

SUBJECT: FY 1997 APPROPRIATIONS
Flood Control, Mississippi River & Tributaries

GROUP: Lower Mississippi Valley Flood Control Association

SUMMARY: Support the Association's request

Comments on the Mississippi River and Tributaries project

Comments on items in the Yazoo Basin

Tabular priority item list

Submitted by:

Yazoo-Mississippi Delta Levee Board
P. O. Box 610
Clarksdale, MS 38614

This statement has been prepared by Kenneth L. Weiland, P.E., CEO and Chief Engineer for the Yazoo-Mississippi Delta (YMD) Levee Board. It is submitted today, February 27, 1996, on behalf of the entire Levee Board and the citizens they represent in the Mississippi Delta, which includes the Yazoo and Sunflower River Basins. The YMD Levee Board supports the general funding testimony for fiscal year 1997, made before you today by the Lower Mississippi Valley Flood Control Association, and as members of this Association, join in their praises of your continuing support for the important flood control projects within the Mississippi River and Tributaries (MR&T) Project. We are extremely concerned about current policies and rhetoric advocating the federal government's retreat from its long standing support of flood control throughout the lower Mississippi valley. We respectfully request your attention, not only to the vital monetary needs of flood control, but to the equally essential policy and administration aspects of our mission.

Due to the fact that the Association's testimony is taking place before any official funding information is available, this statement will not include any specific funding dollar amounts, rather, this statement will outline the critical flood control work needed in our region for the protection of the citizens of our District. In the recent past, a funding target of $400 million has been accepted as a reasonable funding level for the timely prosecution of the work to be completed on the MR&T project as well as the proper maintenance of those works already completed. Both the FY '96 Executive budget request and the final FY '96 final appropriation by Congress fell far short of this figure. As a result, many items of construction, studies, and maintenance have been delayed due to lack of funds for FY '96. The YMD Levee Board makes its most urgent and ardent appeal that proper funding be provided by Congress, not only for the conduct of scheduled FY '97 work, but also to recapture the time lost on projects that have been delayed or postponed in 'FY 96 due to lack of funding. Congress must recognize the damaging impact to the nation's economy that would result from allowing the MR&T project to become more vulnerable to a catastrophic failure of any one of its major components due to delays and neglect caused by inadequate funds.

The following paragraphs identify certain projects included within our Levee District that merit special mention, followed by a tabular listing of key components of our funding request for FY '97.

MISSISSIPPI RIVER LEVEES AND CHANNELS

After witnessing the total devastation on the Upper Mississippi River during the summer of 1993, there can be no question as to the importance of the continued maintenance and upkeep of the mainline levee system along the Lower Mississippi River. The YMD Levee Board, though proud of our long record of protection of the main line levee in our District, understands that your generous funding to insure the timely completion of the MR&T project, as well as major maintenance of the completed portions of the project, are the key to preventing a catastrophic failure of the system.

In this regard, the YMD Levee Board has identified areas on our mainline levee that have developed underseepage problems under the stress of repeated high water on the Mississippi River. These areas are being investigated, and remedies formulated by the Corps of Engineers. It is vital that adequate funding be provided to the Lower Mississippi Valley Division Corps of Engineers and its Districts to hasten these studies and plan formulations, as well as the necessary construction work to eliminate any deficiencies in the mainline levee.

We ask that you not only continue funding for construction and maintenance activities within our district, but also for the entire reach of the Lower Mississippi River included within the MR&T project. This system of levees, channels and bank stabilization work stands out to the world as a model of governmental resolve and success to protect its people, economy, and infrastructure from the ravages of flood waters.

UPPER YAZOO PROJECTS - CONSTRUCTION

Following the destructive flood of 1932, Congress authorized the formulation of a plan that would reduce the risk of flooding of the Mississippi Delta from the uncontrolled release of headwater out of the hills in north central Mississippi. The original plan, released in 1936, included a system of flood control reservoirs that would discharge into a system of channels and levees that could safely convey the headwater from the hills to the Mississippi River. In the late '80s, this project was forced into reformulation under the guise of environmental concern. This reformulation process was completed in late 1993, with the only tangible result being the five year delay of flood control benefits to our District that was promised sixty (60) years ago. Construction was immediately resumed on the item of work that had been in progress at the time the project was forced into reformulation, and the second item of work on the reformulated plan is now underway. The YMD Levee Board respectfully requests that the full capability of the Vicksburg District Corps of Engineers available to this project be adequately funded in order that construction on this long awaited project can proceed as rapidly as possible.

SUNFLOWER BASIN CHANNEL MAINTENANCE PROGRAM

Over time, all streams in the Delta lose their capacity to convey design discharges due to siltation of the bottom of the streams. In the month of July, 1989, sections of the Mississippi Delta along the Sunflower River system experienced significant flooding over half grown row crops of food and fiber. In response to this devastation, the Board of Mississippi Levee Commissioners (MLB), located in Greenville, MS, requested a study by the Corps of Engineers (Corps) to determine whether the reduction of the Sunflower River system flow capacities had contributed to the flooding, and thus, whether the Corps should begin its obligatory maintenance of the channels in this system. Subsequent surveys by the Corps reflected loss of channel capacity from the original design of approximately forty (40) percent. The YMD Levee Board, whose District shares in the damages resulting from the overflow of the rivers in this area joins the MLB in full support of the funding request by the Corps for this maintenance project.

MISSISSIPPI DELTA MISSISSIPPI STUDY

In October of 1992, the YMD Levee Board and the MLB signed sponsorship agreements with Vicksburg District to begin surveys for those portions of the Sunflower River system not included in the reach of the above mentioned maintenance project. This study will identify reaches of this river system above MS Highway 82 that are in need of maintenance as well as compile much needed data on land use changes that have taken place in the Sunflower basin since the original project was completed in the 1960's. The YMD Levee Board respectfully requests your support of this important study.

YAZOO TRIBUTARIES STUDY

The Yazoo Tributaries Study is the last phase of the MR&T project in the Yazoo Basin. This study will identify work necessary for proper drainage and flood control on the major tributaries to the Yazoo River system. Due to the shortfall of funds in FY '96, work on this study was suspended and thus a substantial delay will be introduced into the overall project schedule unless adequate funding is provided in FY '97 to accomplish the work scheduled for FY '97 as well as the work that should have been performed in the current fiscal year. The major tributaries included in this study may play a key role in the development of one of the key commercial sites in the Mississippi Delta. The YMD Levee Board therefore urges Congress to provide full funding for this study.

Respectfully submitted,

KENNETH L. WEILAND, P.E.
CEO, CHIEF ENGINEER

YAZOO-MISSISSIPPI DELTA LEVEE BOARD
ENERGY & WATER RESOURCES
FY '97 APPROPRIATIONS PRIORITIES

DESCRIPTION	YMD LEVEE BOARD REQUEST FY '96 $(000)	YMD LEVEE BOARD REQUEST FY '97 $(000)
Mississippi River Levees, AR, IL, KY, LA, MS, MO, and TN		
Tallulah-Magna Vista, MS, Berm, Item 475-LA	600	-
Tallulah-Magna Vista, MS, Berm, Item 475-LB	1,500	-
Carolina-Valewood, MS, Enlargement	0	-
Mississippi River Channels, AR, IL, KY, LA, MS, MO, and TN		
Pickett MS Dike, MS River mile 704	0	-
Above Norfolk Star Dike, MS River mile 711	0	-
Yazoo Basin, MS - Construction Funding		
Upper Yazoo Projects	11,200	-
Tributaries	2,948	-
Big Sunflower River	8,920	-
Main Stem	25	-
Reformulation Unit	2,810	-
F&WL Mitigation Lands	25	-
Demonstration Erosion Control	22,000	-
Yazoo Basin, MS - Maintenance Funding		
Tributaries	1,135	-
Big Sunflower River	2,012	-
Greenwood	860	-
Main Stem	1,390	-
Will M. Whittington Auxiliary Channel	474	-
Yazoo City	709	-
Yazoo Backwater Area	529	-
Yazoo Basin, MS - Surveys & Study Funding		
Mississippi Delta	1,800	-
Yazoo Tributaries Study	0	-

THE
LITTLE RIVER
DRAINAGE DISTRICT

FLOOD CONTROL & DRAINAGE
SINCE — 1907

BOARD OF SUPERVISORS
E B Gee, Jr , President
Blytheville, Ark
Vic Downing, Vice-President
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Assistant Secretary/Treasurer
H Riley Bock
Attorney, Portageville, Mo.

STATEMENT OF LARRY D. DOWDY
THE LITTLE RIVER DRAINAGE DISTRICT
CAPE GIRARDEAU, MISSOURI

FEBRUARY 27, 1996

MR. CHAIRMAN AND DISTINGUISHED MEMBERS OF THE COMMITTEE:

MY NAME IS LARRY D. DOWDY AND I AM THE EXECUTIVE VICE PRESIDENT FOR THE LITTLE RIVER DRAINAGE DISTRICT HEADQUARTERED IN CAPE GIRARDEAU, MISSOURI. OUR DISTRICT IS A CIRCUIT COURT DRAINAGE DISTRICT CHARGED BY STATE STATUTES TO PROVIDE OUTLET DRAINAGE AND FLOOD PROTECTION TO A SIZABLE PORTION OF SOUTHEAST MISSOURI. OUR DISTRICT HAS BEEN AN OPERABLE ENTITY SINCE 1907.

WE ARE HERE TODAY AS A MEMBER OF THE LOWER MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION WHICH HAS BEEN A SPOKESMAN FOR FUNDING FOR THE MISSISSIPPI RIVER AND TRIBUTARIES PROJECT FOR MANY YEARS. WE SUPPORT THE ASKING OF THAT ASSOCIATION AND TRUST THAT YOU WILL ACT FAVORABLY ON THE REQUESTS THAT THEY MAKE.

OUR DISTRICT HAS APPEARED BEFORE THIS COMMITTEE FOR MANY YEARS. WE ARE APPRECIATIVE OF THE SUPPORT AND COURTESIES THAT HAVE BEEN EXTENDED TO THIS DISTRICT IN THE PAST. WE FEEL CONFIDENT THAT THAT SPIRIT OF COOPERATION WILL CONTINUE.

WE HAVE CONTINUALLY MET THE MANDATES SET FORTH BY THE CITIZENS WE SERVE AND AS REQUIRED BY THE CIRCUIT COURTS OF MISSOURI. WE ARE HERE REPRESENTING MORE THAN 2500 LANDOWNERS IN AN AREA OF SOUTHEAST MISSOURI THAT IS ONE OF THE MOST FERTILE, ONE OF THE MOST PRODUCTIVE, AND ONE OF THE MOST DIVERSIFIED FARMING DELTAS OF OUR NATION. WE ARE THERE ON A DAY TO DAY BASIS AND WE KNOW THE NEEDS OF LOCAL INTEREST. WE KNOW THAT WE HAVE EXPERIENCED TWO (2) OF THE GREATEST FLOODS OF RECORD IN 1993 AND 1995 FROM THE MISSISSIPPI RIVER. ALL OF THAT WATER OCCURRED AND ORIGINATED MANY MILES FROM OUR DISTRICT. IT WAS NOT LOCAL RAINFALLS BUT IT WAS SNOW MELTS AND WATER FROM AREAS FAR UP THE MISSOURI RIVER BASIN COMING DOWN THE MISSISSIPPI RIVER AT SUCH VELOCITIES THAT THE MISSISSIPPI RIVER AND ITS LEVEES WERE UNABLE TO CONTAIN IT. ULTIMATELY IT CAUSED MANY LEVEES TO FAIL AND MUCH WATER TO FLOW INTO LANDS THAT WERE HIGHLY PRODUCTIVE AND TO HOMES THAT WERE VIRTUALLY DESTROYED.

WE ARE VERY MUCH CONCERNED THAT FOR THE FIRST TIME IN SIXTY (60) YEARS THAT WE SEE A REDUCTION IN THE FUNDS BEING SUBMITTED BY THIS COMMITTEE BELOW THAT OF WHAT THE PRESIDENT HAS SUBMITTED IN HIS BUDGET. WE FIND IT UNDESIRABLE AND UNWISE TO REDUCE FUNDING FOR A PROJECT THAT WHEN COMPLETED WILL RETURN MANY MILLIONS OF DOLLARS BACK TO OUR NATION'S ECONOMY AND WILL RELIEVE THE INCONVENIENCES OF FLOODING, INUNDATED ROADS, WATER IN OUR HOUSES, DAMAGES TO OUR PROPERTY, LOSS OF LIFE, CONTAMINATED DEEP WELLS, ETC.

400 BROADWAY - SUITE 302 • P O BOX 159 • CAPE GIRARDEAU, MO 63702-0159 • PHONE 314-335-3439 • FAX 314-335-4895

WE ARE LIKEWISE CONCERNED ABOUT THE CONTINUED PERSONNEL CUTS THAT ARE BEING ASKED BY THE CORPS OF ENGINEERS WHICH IS GETTING TO THE POINT THAT THEY ARE UNABLE TO MEET THE NEEDS OF THE LOCAL INTEREST. THESE PEOPLE KNOW OUR NEEDS AND THEY DO ALL WITHIN THEIR CAPABILITIES AND AUTHORITY TO MEET THOSE NEEDS. PLEASE DO NOT TAKE THAT LOCAL FLAVOR AWAY FROM US.

WE CAN ALSO ATTEST TO YOU THAT THE ABILITY TO PAY CLAUSE THAT WE ARE HAVING TO CONTEND WITH AT THIS TIME AND SINCE 1986 IS VIRTUALLY SHUTTING DOWN PROJECTS IN OUR AREA. THOSE WHO CAN AFFORD TO PAY THEIR COST/SHARING ARE GETTING THEIR PROJECTS DONE AND THEY, IN MOST CASES, HAVE THE ABILITY TO FUND THE ENTIRE PROJECT. THOSE WHO ARE POOR AND THOSE WHO NEED IT THE MOST ARE UNABLE TO MEET THE VERY MINIMUM COST/SHARING AMOUNT AND IN MANY CASES COULD NOT MEET ANY PERCENT OF THE COST. AS YOU CAN SEE THEY ARE LEFT WITH NOTHING. WE PETITION YOU TO CHANGE THESE REQUIREMENTS TO PRESERVE ALL ELEMENTS OF OUR NATION TO RECEIVE SOME RELIEF.

WE ASK YOU TO LOOK AT THE ENTIRE M R AND T PROJECT CLOSELY. REVIEW BACK THE COMMITMENT THAT THE FEDERAL GOVERNMENT MADE TO THE PEOPLE OF THIS GREAT VALLEY. DETERMINE IF OUR GOVERNMENT IS MEETING THEIR END OF THE COMMITMENT, AND I CAN ASSURE YOU THAT LOCAL INTEREST HAS GONE FAR AND BEYOND THE COMMITMENT THAT THEY MADE AT THE OUTSET. REVIEW ALSO THE RETURN ON THE INVESTMENT OF THE FEDERAL DOLLAR. I BELIEVE THAT YOU WILL FIND THAT THE PROJECT IS PAYING BACK TO OUR FEDERAL GOVERNMENT ALMOST TEN FOLD FOR THE DOLLARS THAT HAVE BEEN SPENT.

WE ALSO URGE YOU TO TAKE BACK YOUR PREROGATIVE AND PRIVILEGE OF POLICY MAKING AND SETTING IN ORDER THE RULES WHEREBY SUCH PROJECTS AS THE MISSISSIPPI RIVER AND TRIBUTARIES PROJECT ARE COMPLETED AS SET FORTH BY OUR FOREFATHERS. WHO KNOWS BETTER WHAT THE NEEDS ARE OF THE LOCAL PEOPLE THAN THE PEOPLE THAT REPRESENT THEM? CERTAINLY THOSE WITHIN THE LOOP OF WASHINGTON, D. C. WHO HAVE NEVER SEEN A FARM, NOR FLOOD, NOR CARRIED SAND BAGS, CAN RELATE TO THE PROBLEMS AS WELL AS YOUR CONSTITUENTS. MR. CHAIRMAN WE URGE YOU TO TAKE BACK CONGRESS AUTHORITY AND RESPONSIBILITY ON PROJECTS SUCH AS THIS.

MR. CHAIRMAN WE RESPECTFULLY REQUEST THIS COMMITTEE INCLUDE IN THE 1997 FISCAL YEAR APPROPRIATIONS AN AMOUNT OF NO LESS THAN $350,000,000 FOR THE MISSISSIPPI RIVER AND TRIBUTARIES PROJECT. WE CONTEND THAT THIS IS NOT ENOUGH. $400,000,000 WOULD BE BETTER, HOWEVER, WE REALIZE THAT OUR NATION FACES SOME FISCAL PROBLEMS THAT NEED TO BE ADDRESSED, AND WE CONTINUE TO IMPROVE OUR VALLEY AT THE FUNDING LEVEL.

WE THANK YOU FOR YOUR TIME AND WE TRUST THAT YOU WILL ACT FAVORABLY ON OUR REQUEST TODAY.

YOURS,

Larry D. Dawdy

EXECUTIVE VICE PRESIDENT
THE LITTLE RIVER DRAINAGE DISTRICT
CAPE GIRARDEAU, MISSOURI

STATEMENT OF BILLY J. FELTY

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

My name is Bill Felty. I am Chief Engineer of the St. Francis Levee District of Arkansas. I live in West Memphis, Arkansas which is located at the West side of the Mississippi River in the St. Francis Basin. I am filing this statement in behalf of the Levee and Drainage Districts in the entire St. Francis Basin, Arkansas and Missouri.

We are the local cooperation organizations for the St. Francis Basin which provides flood control and drainage to 3,500 square miles of Delta land beginning at Commerce, Missouri at the foot of Sikeston Ridge on the North, to the mouth of the St. Francis River above Helena, Arkansas, a distance of 235 miles, and extending West from the Mississippi River to Crowley's Ridge having a maximum width of 45 miles.

Within the St. Francis Basin and the Lower Mississippi Valley, we are witnessing a great industrial expansion and the economy in this area is improving rapidly throughout the entire basin especially along the Mississippi River. This industrial growth and prosperity could not exist without drainage and flood control protection made possible by the appropriations from your Committee.

The Civil Works Budget for FY 1997 appropriations for the Mississippi River and Tributaries is being reviewed by your Subcommittee. The amount of $350,000,000 is requested by the Lower Mississippi Valley Flood Control Association for use in the Mississippi River and Tributary Projects throughout the Lower Mississippi Valley.

We support the amount of $350,000,000 requested by the Lower Mississippi Valley Flood Control Association for the Lower Mississippi Valley. It will take that amount to keep the schedule set by the United States Army Corps of Engineers.

The amount requested for the St. Francis Basin Project is $8,600,000 for Arkansas and Missouri. We consider this amount necessary to allow for adequate progress on the project during the next fiscal year. The amount requested is part of the total Civil Works Budget.

We have a large number of members of the Levee District here today to attend the Appropriations Hearings. They have come to show their support for the St. Francis Basin Project

Statement of Billy J. Felty
Page Two

and the Mississippi River and Tributaries Projects.

I feel this Subcommittee will give fair consideration to the needs of the Mississippi River and Tributaries appropriations and I appreciate the time given and work you do to advance the development of the water resource projects.

Respectfully submitted,

Bill Felty

February 27, 1996

Written Testimony
Submitted to
U.S. House of Representatives
Committee on Transportation and Infrastructure
Subcommittee on Water Resources and Environment

by

Ross Atkins
Executive Director
Amite River Basin Drainage and Water Conservation District

February 27, 1996

Mr. Chairman, my name is Ross Atkins, Executive Director of the Amite River Drainage and Water Conservation District. It is indeed an honor and privilege to present written testimony before this distinguished Committee and Chairman. I appreciate this opportunity to inform you of the efforts and needs of the citizens of the Amite River Basin to protect against damage and enhance the quality of life in this beautiful region of the State of Louisiana.

The Amite River Basin encompasses about 2,200 square miles in southeastern Louisiana and southwestern Mississippi. Headwaters of the Amite River originate in southwest Mississippi while Lake Maurepas serves as the designated drain for the Amite and its tributaries. In Louisiana alone, the Amite River and its tributary system meanders through six parishes (counties) with a population of approximately 600,000 people.

On April 14, 1967, the Senate Committee on Public Works adopted a Resolution sponsored by Senator Russell B. Long and the late Senator Allen J. Ellender authorizing the federal government to determine any needed improvements for flood control and related purposes on the Amite River, Bayou Manchac, and Comite River and their tributaries.

Twenty-nine years have elapsed and the U.S. Army Corps of Engineers has initiated and investigated numerous proposals aimed at alleviating flooding and drainage hazards in the Amite

River Basin. The reason for such concentration on flooding and drainage reduction is clear. An excerpt from the Report of Flood Problem Areas and Damage Reduction Measures prepared by the Louisiana Statewide Flood Control Program's Project Evaluation Committee in 1986 states "Flooding along the Amite River and its tributaries is the most serious flooding problem in the Mississippi River - Lake Maurepas Basin... it will take a continuation of coordinated efforts on a large scale to resolve this extremely serious problem."

Historical data from the U.S. Geological Survey depicts 23 floods on the Amite River. Major floods occurred in 1973, 1977, 1979, 1983, 1990 and more recently the fourth worst flooding in history occurred in January of 1993. The most devastating flood on record is the flood of 1983. According to the U.S. Army Corps of Engineers' 1992 Amite River and Tributaries Feasibility Study of the Darlington Reservoir, flood damages from the flood of 1983 inundated 357,000 acres and flooded over 5,000 homes and 200 businesses. The end result was over $172 million in damages.

Mr. Chairman, my message and plea today is for you and this committee to assist in the efforts to minimize loss and trauma caused by our flooding problems in the Amite River Basin. Our first real hope for solutions to our problems is the Comite River Diversion Canal. A 12 mile diversion of high water from the Comite River into the Mississippi River was authorized by Congress in 1992. This project, which is anticipated to cost $121,800,000 will serve as a major relief to the lower Comite while providing a significant relief of the main channel of the Amite River. The Corps informs that as much as 6 feet of water would be diverted from the citizens of Baker, Louisiana and Central Baton Rouge when the canal is completed. In fact, the Corps is on record as stating that the flood in January 1993 would have been almost entirely avoided had the canal been functioning at the time. Clearly, we must vigorously pursue the construction and completion of this vital project. It is a sobering thought to note that over 1,000 homes in East Baton Rouge parish would have been protected in recent floods had this project been in place

The status of the Comite Diversion is now in final Design Memorandum and awaiting re-authorization in the Water Resource Development Acts pending before Congress.

Please investigate and utilize the influence of this committee to ensure the citizens of the Amite River Basin will realize a flood control project which will also sustain and enhance environmental and recreational benefits to the communities.

Mr. Chairman, there are many other much needed solutions to the flooding and drainage problems in the Amite River Basin. The Corps is evaluating many proposals and the Amite River Basin Commission will continue to work closely with the Corps in addressing long-term solutions

Thank you.

YELLOW BEND PORT
CHICOT-DESHA METROPOLITAN PORT AUTHORITY
MCGEHEE, ARKANSAS

THE SLACKWATER HARBOR CONSTRUCTED AT YELLOW BEND HAS EXPERIENCED ABNORMAL GROWTH AND POTENTIAL FOR DEVELOPMENT IN THIS AREA OF THE MISSISSIPPI RIVER DELTA EXCEEDING THE EXPECTATION OF THE ORIGINAL DESIGN.

THERE IS A NEED TO EXTEND THE SLACKWATER HARBOR BEYOND THE EXISTING TERMINAL TO ACCOMMODATE PRESENT AND ADDITIONAL USAGE. IT IS REQUESTED THAT THE EXISTING SLACKWATER HARBOR BE EXTENDED AT AN ESTIMATED COST OF $4.3 MILLION TO MEET THIS NEED.

STATEMENT OF
CHICOT-DESHA METROPOLITAN PORT AUTHORITY
MCGEHEE, ARKANSAS
TO
THE CHAIRMAN
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
APPROPRIATIONS COMMITTEE

UNITED STATES SENATE
AND
UNITED STATES HOUSE OF REPRESENTATIVES
FEBRUARY 27, 1996

MR. CHAIRMAN AND MEMBERS OF THIS DISTINGUISHED COMMITTEE, MY NAME IS FRED DENTON. I SERVE AS THE CHAIRMAN OF THE CHICOT-DESHA METROPOLITAN PORT AUTHORITY WHICH IS THE GOVERNING AUTHORITY FOR THE SLACKWATER HARBOR AND PORT OF YELLOW BEND ARKANSAS LOCATED AT RIVER MILE 554.1 ON THE MISSISSIPPI RIVER. WE ARE PLEASED TO HAVE THE OPPORTUNITY TO SUBMIT THIS STATEMENT IN CONJUNCTION WITH THE LOWER MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION.

I. HISTORY AND FINANCING:

THE CHICOT-DESHA METROPOLITAN PORT AUTHORITY WAS ESTABLISHED APPROXIMATELY EIGHTEEN YEARS AGO THROUGH JOINT EFFORTS BY CHICOT AND DESHA COUNTIES, LOCATED IN SOUTHEAST ARKANSAS. AFTER YEARS OF HARD WORK BY MANY INDIVIDUALS IN BOTH COUNTIES, AND WITH THE ASSISTANCE OF STATE AND FEDERAL GOVERNMENTS, THE YELLOW BEND PORT BECAME A REALITY AND OPENED FOR BUSINESS A LITTLE OVER TWO YEARS AGO.

YELLOW BEND HARBOR AND INFRASTRUCTURE CONSISTS OF AN ENTRANCE CHANNEL AND A 350 X 610 FOOT HARBOR AREA, A 40-TON OVERHEAD BRIDGE CRANE WITH A 60-FOOT SPAN, EQUIPPED WITH A 10 CUBIC YARD HYDRAULICALLY OPERATED CLAM SHELL, AN ELECTRIC WINCH, A 100,000 POUND TRUCK SCALE AND A MATERIAL CONVEYOR SYSTEM FOR LOADING AND UNLOADING BARGES.

THE COST OF THE PROJECT WAS APPROXIMATELY $5,800,000 OF WHICH APPROXIMATELY $3,500,000 WAS FURNISHED BY THE FEDERAL GOVERNMENT, $500,000 WAS PROVIDED BY THE STATE OF ARKANSAS AND THE BALANCE OF $1,800,000 WAS FURNISHED BY LOCAL FUNDING. EVEN THOUGH THE PORT ITSELF IS LOCATED IN THE DELTA REGION OF SOUTHEAST ARKANSAS, AN ACUTELY ECONOMIC DEPRESSED AREA, THE CITIZENS TO BE SERVED BY THE PORT HAVE MADE THE SACRIFICES NECESSARY TO FINANCE THE PROJECT AND START-UP COST BY VOTING A LIMITED TWO (2) YEAR ONE CENT SALES TAX AND FINANCING THE BALANCE. IT IS RECOGNIZED THAT MANY OF THE CITIZENS IN THESE COUNTIES ARE DEPENDENT ON WELFARE BENEFITS FURNISHED BY THE

FEDERAL GOVERNMENT, AND THAT THE POTENTIAL ECONOMIC BENEFITS OF THE PORT COULD PROVIDE MUCH NEEDED JOBS; THEREBY REDUCING THE NEED FOR WELFARE BENEFITS. THE FEDERAL GOVERNMENT'S CONTRIBUTION TO THIS PROJECT WAS, INDEED, A WISE INVESTMENT AND SAVINGS TO THE TAXPAYERS OF THIS COUNTRY.

II. PORT USAGE AND ECONOMIC BENEFITS TO DATE:

IN LESS THAN TWO AND ONE-HALF YEARS, APPROXIMATELY 310,000 TONS OF COMMODITIES, SUCH AS STEEL RAIL IMPORTED FROM RUSSIA, RAW RUBBER FROM ASIA, ROCK FOR HIGHWAY CONSTRUCTION, FERTILIZER, COTTONSEED, SOYBEANS, AND LOGS, HAVE MOVED THROUGH THE PORT. THIS IS BY ALL ACCOUNTS AN EXCELLENT START FOR A RELATIVELY NEW PORT.

THIS ACTIVITY HAS GENERATED APPROXIMATELY $900,000 IN DIRECT REVENUES. HISTORICALLY, MONEY TURNS OVER APPROXIMATELY SIX (6) TIMES IN AN AREA. THIS WOULD MEAN OVER $5,000,000 IN ECONOMIC ACTIVITY TOOK PLACE IN THIS DEPRESSED SECTION OF THE COUNTRY.

BECAUSE OF THE PORT'S EXISTENCE, A NEW LOG CHIPPING COMPANY HAS LOCATED NEAR THE PORT TO SERVE A LOCAL PAPER MILL WITH RAW PRODUCTS, THUS CREATING NEW JOBS. LOGS WILL BE SHIPPED IN TO THE COMPANY THROUGH THE PORT, AND EXCESS CHIPS WILL BE MOVED OUT THROUGH THE PORT FOR SHIPMENT TO OTHER PAPER MILLS.

III. PORT OPPORTUNITIES AND REQUIREMENTS:

POTENTIAL MANUFACTURERS AND SHIPPERS ARE CONTINUOUSLY EXPRESSING INFRASTRUCTURE NEEDS WHICH EXCEED THE PRESENT AVAILABLE FACILITIES. FOR THE PORT AUTHORITY TO ACCOMMODATE THE NEEDS OF THESE COMPANIES, EXPANSION OF THE HARBOR AND SUPPORTING INFRASTRUCTURE IS VITAL. ACCORDINGLY, THE PORT AUTHORITY AND AREA COMMUNITY AND LOCAL GOVERNMENT LEADERS ARE WORKING DILIGENTLY ON PLANS TO EXPAND THE PORT'S 40-TON CRANE INTO A 30,000 SQUARE FOOT MULTI-PURPOSE WAREHOUSE, SECURING ON-SITE RAIL SERVICE AND CONSTRUCTION OF COMMODITY AND FERTILIZER STORAGE FACILITIES. THEY ARE WORKING WITH LOCAL AREA BANKS TO SECURE LOANS FOR SOME OF THESE PROJECTS WHICH WILL BE REPAID BY THE PORT AUTHORITY'S SHARE OF THE SHIPPING REVENUES. HOWEVER, DUE TO THE ORIGINAL CORPS OF ENGINEER'S DESIGN, THE WATER FRONTAGE IN THE HARBOR IS BASICALLY CONSUMED BY ONE TERMINAL OPERATION; THE USAGE HAS EXCEEDED THEIR ORIGINAL EXPECTATIONS. DURING PERIODS OF LOW RIVER STAGE THAT OCCUR ANNUALLY ON THE MISSISSIPPI RIVER, USE OF

THE PORT IS SEVERELY LIMITED TO SERVING ONLY ONE BARGE AT A TIME. THE HARBOR COULD BE EXTENDED TO ELIMINATE THIS PROBLEM WHICH WOULD GREATLY ENHANCE THE PUBLIC TERMINAL OPERATIONS AND CREATE OPPORTUNITIES FOR PRIVATE SPECIAL PURPOSE TERMINALS. ADDITIONAL PUBLIC AND PRIVATE TERMINAL OPERATIONS WILL CREATE OPPORTUNITIES TO ENTICE VALUE ADDED MANUFACTURING FIRMS TO LOCATE NEAR THE PORT, THEREBY PROVIDING MUCH NEEDED JOBS. THE PORT AUTHORITY HAS OPTIONS TO PURCHASE LAND ADJACENT TO THE PORT AND IS WORKING WITH CONSULTANTS TO PRODUCE PLANS FOR THE ESTABLISHMENT OF AN INDUSTRIAL PARK ON THIS PROPERTY. WITHOUT THE HARBOR EXTENSION, THE CREATION OF BADLY NEEDED NEW JOBS WILL BE SEVERELY RESTRICTED.

MR. CHAIRMAN, AS NOTED EARLIER, THE FEDERAL GOVERNMENT ASSISTED THE PORT AUTHORITY WITH FINANCIAL ASSISTANCE FOR THE CONSTRUCTION OF YELLOW BEND PORT AND LOCAL CITIZENS DID THEIR PART TO MAKE THIS PROJECT A REALITY. TO DATE, THE FINANCIAL RETURN ON MONIES INVESTED BY ALL PARTIES HAS BEEN EXCELLENT. THEREFORE, WE ARE REQUESTING THE FEDERAL GOVERNMENT TO CONTINUE THIS PARTNERSHIP BY GRANTING FINANCIAL ASSISTANCE IN THE AMOUNT OF $4,300,000 FOR THE HARBOR EXTENSION WHICH WILL FURTHER ENHANCE POSITIVE RESULTS FOR THIS PARTNERSHIP. WE URGE YOU TO SUPPORT THE EXTENSION OF THIS HARBOR.
ON BEHALF OF THE CITIZENS OF CHICOT AND DESHA COUNTIES, THANK YOU FOR THE OPPORTUNITY TO MAKE THIS STATEMENT.

FRED DENTON, CHAIRMAN
CHICOT-DESHA METROPOLITAN PORT AUTHORITY
P.O. BOX 728
MCGEHEE, ARKANSAS 71654
TELEPHONE - 501-222-3880
FAX - 501-222-4853

KENNY GOBER, EXECUTIVE DIRECTOR
CHICOT-DESHA METROPOLITAN PORT AUTHORITY
P.O. BOX 305
MCGEHEE, ARKANSAS 71654
TELEPHONE - 501-222-3732
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STATEMENT OF JAMES E. WANAMAKER
CHIEF ENGINEER
BOARD OF MISSISSIPPI LEVEE COMMISSIONERS
TO THE
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
ON BEHALF OF THE
APPROPRIATION FOR FLOOD CONTROL
MISSISSIPPI RIVER AND TRIBUTARIES PROJECT
REQUESTING FISCAL YEAR 1997
APPROPRIATION
FEBRUARY 27, 1996

BOARD OF
MISSISSIPPI LEVEE COMMISSIONERS
RIVES C. CARTER, PRESIDENT
P.O. BOX 637
GREENVILLE, MISSISSIPPI 38702-0637
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COMMISSIONERS
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MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

I am James E. Wanamaker, Chief Engineer for the Board of Mississippi Levee Commissioners, Greenville, Mississippi, and I have the privilege of presenting this statement on behalf of this Board and the citizens of this Levee District. This District consists of the counties of Bolivar, Issaquena, Sharkey, Washington, and parts of Humphreys and Warren in the Lower Yazoo Basin in Mississippi.

Although the President has not yet presented his budget request for the Corps of Engineers Civil Works Program for fiscal 1997, the Lower Mississippi Valley Flood Control Association will be presenting a general statement in support of an appropriation of $400,000,000.00. This level of funding is required to complete the Mississippi River and Tributaries Project in an orderly planned manner. These funds support the construction, surveys, engineering, and the operation and maintenance of this project that spans seven states. The Congress for almost 70 years has generously supported this project that protects the Lower Mississippi Valley from flood waters originating from 41% of the United States, and provides an inland waterway that is vital to the economy of not only the United States but the entire World.

A major component of this project is a system of Mainline Mississippi River Levees that protects 28,000 square miles in the alluvial valley from the ravages of flood. Without having the benefit the President's budget request for this fiscal year, we can only address funding requirements that we estimate is needed by the Vicksburg District for completion of the Mainline Mississippi River Levee Enlargement and Berm Program in that District. Our request last year included funds that would allow work to be performed on 8 contracts in the Vicksburg District. Because of the reduced funds being experienced in the District, none of these contracts will be awarded this fiscal year. With this in mind, we are requesting that the MR&T budget for Mainline Mississippi River Levees include adequate funding to allow an expenditure of $11,200,000.00 by the Vicksburg District for Levee Enlargement and Berm Construction. The Board of Mississippi Levee Commissioners has made a commitment to provide adequate funding for right-of-way acquisition that will allow these items to be awarded during fiscal year 1997.

With the first item of construction on the Upper Steele Bayou Project nearing completion at this time, the Board of Mississippi Levee Commissioners had anticipated awarding the remaining three contracts during fiscal year 1996. In an effort to meet the schedule for right-of-way acquisition, the Levee District employed additional personnel and borrowed funds to cover their expense now only to find that the award of these contracts will be delayed until FY 1997. An appropriation of $11,000,000.00 for the Yazoo Basin Big Sunflower River & Tributaries Project will allow the Vicksburg District to proceed with the award of contracts during FY 1997. The Levee District continues in this effort to provide the rights-of-way on the projected schedule to avoid any delay in the construction of this project so vitally needed to protect the City of Greenville.

With construction initiated on the Upper Yazoo Project, we had looked forward to seeing contracts awarded in fiscal 1996 on channel work that would extend to near Greenwood. As with all of the other projects included in the Mississippi River & Tributaries Budget, the reduction in available funds for FY 1996 will not allow the Vicksburg District to award any construction contracts during this fiscal year. It is imperative that $14,000,000.00 be included in the appropriations for FY 1997 to avoid any additional delays in this project which will provide flood protection to many cities throughout the Delta.

As the Vicksburg District continues to proceed with the reformulation of the Yazoo Backwater Project, the Board of Mississippi Levee Commissioners continues to feel that the declaration of the remaining items in this project as separable elements fails to consider that this is an integral part of the complex Mississippi River & Tributaries Project. This project was authorized in 1941 by the Congress to offset the increase in stages on the Mississippi River that would be experienced in the lower Mississippi Delta caused by the removal of the Eudora Floodway from the Mississippi River Project. The Eudora Floodway would allow over bank flows of the Mississippi River to pass across the States of Arkansas and Louisiana to the Gulf of Mexico. The additional protection for the states of Arkansas and Louisiana is currently being paid for by the residents of the Lower Yazoo Basin of the Mississippi Delta. As the Yazoo Backwater Project comes out of reformulation, the Board of Mississippi Levee Commissioners continues to strive to see that this project is constructed under the authorization provided by the Congress at full Federal funding.

Many of the problems being experienced throughout the country are the result of the assumption of policy making by the Executive Branch of the Federal Government. The failure of the Secretary of Army to address "Ability to Pay" as they have been directed on at least two occasions by the Congress in the Water Resources Acts of 1990 & 1992 is a clear example of the Executive Branch's failure to carry out the direction of Congress. The desire of the Executive Branch to utilize cost sharing to remove many projects authorized by the Congress from the reality of being constructed becomes more apparent every day. When the Congress passed the Water Resources Development Act of 1986 which included the provisions for cost sharing it was not the intent of the Congress to have any project go unconstructed because of the inability of the non-Federal sponsor to pay. After 10 years the Executive Branch has failed to provide a policy that will comply with the intent of Congress when they passed the Water Resources Act of 1986.

As we prepare to initiate construction on the Big Sunflower River Bogue Phalia Maintenance Project, we are again faced with the possibility that policies set by the Executive Branch are jeopardizing this much needed work. The original General Design Memorandum on this project anticipated the need for major maintenance when this project became approximately 30 years old and very closely projected the cost of this work. The non-Federal sponsors for this project have each year provided funds to fulfill their responsibilities on the Big Sunflower River Project that contains over 600 miles of channel. Many individuals throughout the Mississippi Delta have made investments in the land, construction of homes and businesses with the expectation that the responsible parties would see that this project was maintained to provide the level of flood protection authorized by the Congress. It again appears that the Executive Branch is considering policies that would require this maintenance to be economically justified a second time before construction can start. The Vicksburg District has completed a comprehensive Supplemental Environmental impact statement for this work and we ask that funding in the amount of $1,500,000.00 be provided which will allow construction to be initiated on this maintenance project.

The Board of Mississippi Levee Commissioners would also like to express to you the need for continued funding of many other projects that provide flood protection to the Mississippi Delta. The Demonstration Erosion Control Project is doing an excellent job in controlling sediments in our Delta channels which will greatly reduce the need for maintenance in the future. We are asking that $19,000,000.00 be provided in FY 97 for this work. As we continue toward the completion of the reformulation process being carried out in the Yazoo Basin, it is necessary that $3,500,000.00 be provided to keep this work on schedule.

The need for wetlands reform is being experienced first hand by the levee districts along the Mainline Mississippi River Levee. The "Notice of Intent to Sue" received by the Vicksburg District, Corps of Engineers from the Sierra Club Legal Defense Fund is challenging the right of the levee districts to utilize their previously acquired rights of way for borrow materials to be used in the levee construction program. These lands were acquired by the levee districts for borrow and the denial of that use appears to constitute a taking. We urge the Congress to continue in its effort to provide landowners compensation in instances similar to that outlined above.

As soon as the President releases his budget for fiscal year 1997, we will be better able to access the needs for these projects. At that time, we may find it necessary to supplement our request. We are grateful for the consideration given to us each year by the Committee and appreciate the opportunity to present our requests to you at this time.

Mr. MYERS. Well, thank you, Curtis and David, for your very fine testimony. It is shocking sometimes to see the burden the rest of the country is placing, or 40 percent of the rest of the country is placing, on the lower reaches of the Mississippi; and somehow we have tried to equate that as best we can from this committee.

We appreciate the kind words and very generous words you both gave here, and everyone here for the standing ovation for Tom and me. I wish we deserved it, but it is nice to receive it.

Mr. PATTERSON. Indeed, you do deserve it.

Mr. BEVILL. Speak for yourself, John.

Mr. MYERS. Modesty finds itself in strange places sometimes, doesn't it? But we do appreciate the job you all do; and George, we did finally recognize you, after all.

Mr. GRUGETT. Thank you.

Mr. MYERS. A great many of you here, we have worked with you through the years, and we appreciate the friendship and willingness that you have annually made your trek or your trip to Washington. I know it is costly to each of you, but you know it does work. Your coming in here gives us the ability to go to the other body sometimes and argue for these.

And you mentioned the fact that you are here a month early at least, probably even two months early, but we are faced with a particular problem here. The executive has not sent their budget down to us, and the agencies are afraid to come down because they don't know what to ask for, but we know what you want and we kind of go on and do our thing as much as we can do within the limits of the budget we have. We need to hear more from you than from the agencies anyway. We like to feel that we tell the agencies what to do.

You mentioned the fact, David, that sometimes the executive has usurped some of that, and it has been our own fault possibly that we have let that happen, but at least this committee has tried to avoid that. But we do appreciate your fine testimony.

Tom, do you have questions?

Mr. BEVILL. I just want to commend you and the leadership that each of you has shown through the years on these projects. You have been great to work with, and I certainly appreciate you, and I know your good work will continue right on. Thank you.

Mr. SOLOMON. Thank you.

Mr. Chairman, I want to say that I am here sort of by default because N.B. Williams, who is chairman of our executive committee, underwent a shoulder operation and was incapacitated; and that is the only reason I got to appear before you. I don't appreciate him having an operation, but I appreciate the opportunity to be here.

Mr. MYERS. A shoulder?

Mr. SOLOMON. They replaced the shoulder.

Mr. MYERS. Replaced the shoulder.

Mr. GRUGETT. Mr. Chairman, he called me this morning and asked that I express his regrets for not being here. He is coming along real well. He is in therapy now and coming along well.

Mr. MYERS. That is the worst part of it. I have had both of mine done and that therapy tears you apart. There is no sympathy with those therapists. The one I had was a young lady, and she said you have to do that. I said my shoulder was not doing that before. I never could scratch between my shoulders that way. I could after she got through with me. It is tough. That is the worst part about it.

Well, thank you again, each of you, for your annual trip in here. You see, we have young leaders coming in here to take our place, so you don't need Tom and me around here.

Mr. FRELINGHUYSEN. I doubt it.

Mr. MYERS. We will sit out there and watch what kind of job they are doing here.

Thank you, George, David, Curtis.

TUESDAY, FEBRUARY 27, 1996.

NEW ORLEANS AREA PORTS AND WATERWAYS

WITNESSES

GEORGE E. DUFFY, CHAIRMAN, LOUISIANA GOVERNOR'S TASK FORCE ON MARITIME INDUSTRY

CAPTAIN C.E. CLAYTON, PRESIDENT, NEW ORLEANS-BATON ROUGE STEAMSHIP PILOTS ASSOCIATION

CAPTAIN MARK DELESDERNIER, JR., PRESIDENT, CRESCENT RIVER PORT PILOTS ASSOCIATION

CHANNING HAYDEN, PRESIDENT, NEW ORLEANS STEAMSHIP ASSOCIATION

CAPTAIN JOHN L. LEVINE, PRESIDENT, ASSOCIATED BRANCH PILOTS

Mr. MYERS. The committee will now be pleased to hear from the New Orleans area ports and waterways delegation here. Mr. Duffy, you will make the introductions.

You have 20 minutes. Your prepared statements will be placed in the record and you may proceed as you like.

Mr. DUFFY. Thank you very much, Mr. Chairman. My name is George Duffy. I am Chairman of the Governor's Task Force for the Maritime Industry for the State of Louisiana. I am also President of Navios Ship Agencies.

Joining me up here at the desk, on my extreme left, is Mr. Channing Hayden, who is the President of the New Orleans Steamship Association. Sitting next to me is Captain Jack Levine, President of the Associated Branch Pilots. On my far right is Captain Mark Delesdernier, President of the Crescent River Port Pilots Association. And sitting next to me is Captain Joseph Clayton, President of the Baton Rouge Pilots, but also Vice Chairman of the Board of Commissioners for the Port of New Orleans.

Mr. MYERS. You have a lot of captains there, haven't you?

Mr. DUFFY. We sure do.

Mr. MYERS. Anybody ever made major?

Mr. LEVINE. No, we just get demoted.

Mr. MYERS. How is my cousin doing?

Mr. LEVINE. He is still there.

Mr. MYERS. Tell him hello for me.

Mr. LEVINE. I sure will.

Mr. DUFFY. Mr. Chairman, we are here to testify on behalf of the ports of Louisiana located on the lower Mississippi River and the maritime interests related there and to the State of Louisiana. In the interest of time, I would like to briefly summarize by formal testimony and ask that the full statement and supplemental graphics be included for the record.

I am accompanied at the table by the gentlemen I just introduced, and we are accompanied in the audience by a number of prominent members of the maritime industry of the State of Louisiana. I would like at this time for them to stand, and if we could have placed into the record their names and corporate affiliations——

Mr. MYERS. Provide the names and they will be placed in the record.

Mr. DUFFY. Thank you very much, Mr. Chairman. Would the gentlemen please stand? These individuals represent many aspects of our industry in the coal, grain, oil and other related maritime companies as well as some of the ports of Louisiana.

We are here today to testify in support of the United States Army Corps of Engineers' New Orleans district budget as outlined in our detailed testimony. The Mississippi River is a vital link to foreign commerce from the Gulf of Mexico through the heartland of the United States as far west as Catoosa, Oklahoma, north to Minneapolis and Chicago, and to the northeast, Pittsburgh, and to the Nashville, Tennessee and West Virginia areas.

Foreign commerce that transits through the waterway systems of the Mississippi, the Ohio River and the Missouri River for this year equated to 409 million tons of foreign and domestic waterborne commerce in the deep draft areas of our ports. This cargo moves to and from inland destinations by river barge, rail and truck. This tonnage equates to 23 percent of our Nation's foreign waterborne commerce.

The maritime industry relies heavily on the maintenance of the river system and the development of future planning to allow us to maintain a competitive edge over foreign commerce. The funding that we are requesting will provide the Corps the capability to maintain our waterway system in a reliability and efficient manner.

Reliability is extremely important when we are dealing in international markets. Through the efforts of the Corps and the expertise of our local pilots and mariners, we are able to maximize the present channels. And even though we have had effects from the mighty Mississippi and Mother Nature over the past two years, the Corps has been able to readily respond to reestablish the channels through which this foreign commerce flows.

Twice within the past two years we have lost draft at the southwest pass area due to silting. Both years, the Corps' dredges, along with private industry, have provided us with eight hopper dredges and still we lost draft. In fact, this past year, the Corps' dredge Essayons sailed from the West Coast and worked in the southwest pass area, as there was insufficient capacity available from the private sector to help reestablish the necessary draft to handle the deep draft oceangoing vessels.

The Corps of Engineers is in the process of revisiting the minimum dredge fleet issue. We are concerned that government cutbacks could influence decisions that would impede the present Corps of Engineers dredge capacity. We strongly support the Corps' dredges, as they are part of the necessary capacity to keep the river systems and other river systems in the United States dredged, which allows us to move high tonnages of cargo in foreign commerce.

Therefore, Mr. Chairman, we recommend to the Congress the appropriations for full capabilities for the construction funding and the operating and maintenance funding for the United States Army Corps of Engineers for the lower Mississippi River system for the Corps' fiscal 1997 budget, including its full capabilities for needed repairs of the southwest pass dikes and the foreshore rock dikes from mile 0.5 AHP to mile 0.8 BHP. These are designated areas, and Captain Levine can discuss those further.

That concludes my statement, Mr. Chairman, and at this time I would like to have Captain Clayton present his testimony on behalf of the Port of New Orleans.

[The statement of Mr. Duffy follows:]

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FEBRUARY 27, 1996

STATEMENT OF GEORGE E. DUFFY

MR. CHAIRMAN, MY NAME IS GEORGE DUFFY AND I AM CHAIRMAN OF THE GOVERNOR'S TASK FORCE ON MARITIME INDUSTRY FOR THE STATE OF LOUISIANA. I AM HERE TO TESTIFY ON BEHALF OF THE PORTS OF LOUISIANA LOCATED ON THE LOWER MISSISSIPPI RIVER AND THE MARITIME INTERESTS RELATED THERETO FOR THE STATE OF LOUISIANA. IN THE INTEREST OF TIME, I WOULD LIKE TO BRIEFLY SUMMARIZE MY TESTIMONY AND ASK THAT THE FULL WRITTEN STATEMENT AND SUPPLEMENTAL GRAPHICS BE INCLUDED FOR THE RECORD. I AM ACCOMPANIED AT THE TABLE BY CAPTAIN JOE CLAYTON, PRESIDENT OF THE NEW ORLEANS-BATON ROUGE PILOTS ASSOCIATION AND VICE CHAIRMAN OF THE BOARD OF COMMISSIONERS FOR THE PORT OF NEW ORLEANS, CAPTAIN JACK LEVINE, PRESIDENT OF THE ASSOCIATED BRANCH PILOTS, CAPTAIN MARK DELESDERNIER, PRESIDENT OF THE CRESCENT RIVER PORT PILOTS ASSOCIATION AND A COMMISSIONER OF THE BOARD OF COMMISSION FOR THE PORT OF NEW ORLEANS, AND MR. CHANNING HAYDEN, PRESIDENT OF THE NEW ORLEANS STEAMSHIP ASSOCIATION. I WOULD LIKE TO ACKNOWLEDGE THE PROMINENT MEMBERS AND REPRESENTATIVES OF THE LOUISIANA MARITIME INDUSTRY FROM THE PORTS OF LOUISIANA, THE COAL, GRAIN, OIL AND MARITIME COMPANIES THAT HAVE ACCOMPANIED US TO WASHINGTON IN SUPPORT OF OUR TESTIMONY. I WOULD REQUEST THEM TO STAND AT THIS TIME AND THAT THEIR NAMES AND CORPORATE AFFILIATIONS BE PLACED IN THE CONGRESSIONAL RECORD.

WE ARE HERE TODAY TO TESTIFY IN SUPPORT OF THE U. S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT BUDGET AS OUTLINED IN OUR DETAILED

TESTIMONY. THE MISSISSIPPI RIVER IS A VITAL LINK TO FOREIGN COMMERCE FROM THE GULF OF MEXICO THROUGH THE HEARTLANDS OF THE UNITED STATES AS FAR WEST AS CATOOSA, OKLAHOMA, NORTH TO MINNEAPOLIS AND CHICAGO AND TO THE EAST, PITTSBURGH, AND TO THE NASHVILLE, TENNESSEE AND WEST VIRGINIA AREAS. FOREIGN COMMERCE THAT TRANSITS THROUGH THE MISSISSIPPI RIVER FOR YEAR 1994 EQUATED TO 409 MILLION TONS OF FOREIGN AND DOMESTIC WATERBORNE COMMERCE IN THE DEEP DRAFT AREAS. THIS CARGO MOVES TO AND FROM INLAND DESTINATIONS BY RIVER BARGES, RAIL AND TRUCKS. THIS TONNAGE EQUATES TO 23% OF OUR NATION'S FOREIGN WATERBORNE COMMERCE. THE MARITIME INDUSTRY RELIES HEAVILY ON THE MAINTENANCE OF THE RIVER SYSTEM AND THE DEVELOPMENT OF FUTURE PLANNING TO ALLOW US TO MAINTAIN A COMPETITIVE EDGE OVER FOREIGN COMPETITION.

THE FUNDING THAT WE ARE REQUESTING WILL PROVIDE THE CORPS THE CAPABILITIES TO MAINTAIN OUR WATERWAY SYSTEM IN A RELIABLE AND EFFICIENT MANNER. RELIABILITY IS EXTREMELY IMPORTANT WHEN WE ARE DEALING IN INTERNATIONAL MARKETS. THROUGH THE EFFORTS OF THE CORPS AND THE EXPERTISE OF OUR LOCAL PILOTS AND MARINERS, WE ARE ABLE TO MAXIMIZE THE PRESENT CHANNELS, AND EVEN THOUGH WE HAVE HAD AFFECTS FROM THE MIGHTY MISSISSIPPI AND MOTHER NATURE, THE CORPS HAS BEEN ABLE TO RAPIDLY RESPOND TO RE-ESTABLISH THE CHANNELS THROUGH WHICH THIS FOREIGN COMMERCE FLOWS.

TWICE WITHIN THE LAST TWO (2) YEARS, WE HAVE LOST THE DRAFT AT THE SOUTHWEST PASS DUE TO SILTING. IN BOTH YEARS, THE CORPS DREDGES, ALONG WITH PRIVATE INDUSTRY HAVE PROVIDED US WITH EIGHT (8) HOPPER DREDGES, AND STILL WE LOST DRAFT. IN FACT, THIS PAST YEAR, THE CORPS DREDGE

"ESSAYONS" SAILED FROM THE WEST COAST AND WORKED IN SOUTHWEST PASS, AS THERE WAS INSUFFICIENT CAPACITY AVAILABLE FROM THE PRIVATE SECTOR TO HELP RE-ESTABLISH THE NECESSARY DRAFT TO HANDLE THE DEEP DRAFT OCEAN VESSELS. THE CORPS OF ENGINEERS IS IN THE PROCESS OF REVISITING THE MINIMUM DREDGE FLEET ISSUE. WE ARE CONCERNED THAT GOVERNMENT CUT-BACKS COULD INFLUENCE DECISIONS THAT WOULD IMPEDE THE PRESENT CORPS HOPPER DREDGE CAPACITY. WE STRONGLY SUPPORT THE CORPS DREDGES, AS THEY ARE PART OF THE NECESSARY CAPACITY TO KEEP THIS RIVER SYSTEM AND OTHER RIVER SYSTEMS IN THE UNITED STATES DREDGED, WHICH ALLOWS US TO MOVE HIGH TONNAGES OF CARGO IN FOREIGN COMMERCE.

THEREFORE, MR. CHAIRMAN, WE RECOMMEND TO CONGRESS THE APPROPRIATIONS FOR FULL CAPABILITIES FOR THE CONSTRUCTION FUNDING AND

THE OPERATING AND MAINTENANCE FUNDING FOR THE U. S. ARMY CORPS OF ENGINEERS FOR THE LOWER MISSISSIPPI RIVER SYSTEM FOR THE CORPS' FISCAL YEAR 1997, INCLUDING ITS FULL CAPABILITIES FOR NEEDED REPAIRS OF THE SOUTHWEST PASS PILE DIKES AND THE FORESHORE ROCK DIKES FROM MILE 0.5 AHP TO MILE 0.8 BHP.

NAMES AND AFFILIATIONS TO BE PLACED IN THE RECORD

MR. JIM ADAMS, ASSISTANT VICE PRESIDENT
AMERICAN COMMERCIAL BARGE LINE COMPANY

MR. ALAN ALARIO, PRESIDENT
ALAN ALARIO, INC.

CAPTAIN RUSSEL BELSOME, PRESIDENT
ASSOCIATED FEDERAL COAST PILOTS
OF LOUISIANA, INC.

MR. WILLIAM R. BURKE, III
BURKE-KLEINPETER

CAPTAIN C. E. CLAYTON, PRESIDENT
NEW ORLEANS-BATON ROUGE STEAMSHIP
PILOTS ASSOCIATION

CAPTAIN MARK DELESDERNIER, PRESIDENT
CRESCENT RIVER PORT PILOTS ASSOCIATION

MR. GEORGE E. DUFFY, PRESIDENT
NAVIOS SHIP AGENCIES, INC.

MR. CHANNING F. HAYDEN, JR., PRESIDENT
NEW ORLEANS STEAMSHIP ASSOCIATION

MR. GENE HYMEL, EXECUTIVE DIRECTOR
NEW ORLEANS BOARD OF TRADE

MR. STEPHEN C. JUAN, COMMISSIONER
ST. BERNARD PORT, HARBOR &
TERMINAL DISTRICT

MR. GEORGE KLEINPETER, PRESIDENT
BURKE-KLEINPETER

MR. GORDON KONRAD, PRESIDENT
BELLE CHASSE MARINE

CAPTAIN JOHN LEVINE, PRESIDENT
ASSOCIATED BRANCH PILOTS

MR. KIRK MEYERS, DIRECTOR OF INTERNATIONAL
PROGRAMS & REGULATORY AFFAIRS
NORTH AMERICAN EXPORT GRAIN ASSN.

MR. C. R. "PETE" MOORE, PRESIDENT
MISSISSIPPI VALLEY COAL TRADE &
TRADE COUNCIL

MR. LARRY NOLAND, VICE PRESIDENT
ELECTRO-COAL TRANSFER CORPORATION

MR. LEROY PHILLIPS, TREASURER
ST. BERNARD PORT, HARBOR &
TERMINAL DISTRICT

MR. GARY PRUITT, EXECUTIVE DIRECTOR
GREATER BATON ROUGE PORT COMMISSION

MR. IRWIN RUIZ, EXECUTIVE DIRECTOR
ST. BERNARD PORT, HARBOR &
TERMINAL DISTRICT

MR. JOHN WARE, EXECUTIVE DIRECTOR
SOUTH TANGIPAHOA PARISH PORT

MR. DOUGLAS WEBER, PRESIDENT
WEBER MARINE, INC.

MR. ROBERT WOOTEN, VICE PRESIDENT
WEBER MARINE, INC.

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February 27, 1996

Summary of testimony of George E. Duffy, Chairman of the Governor's Task Force on Maritime Industry before the House Appropriations Subcommittee on Energy and Water Development on February 27, 1996 in reference to the following projects:

1. **MISSISSIPPI RIVER SHIP CHANNEL, GULF TO BATON ROUGE, LA (CONSTRUCTION GENERAL)**
   We understand that sufficient funds are expected to be available to perform the FY 97 work on the saltwater intrusion mitigation plan and to perform design studies for a potential phase III fifty-five foot channel.

2. **MISSISSIPPI RIVER, BATON ROUGE TO THE GULF, MAINTENANCE DREDGING AND GI FUNDS FOR NAVIGATION STUDY**
   Recognizing that Congress appropriated $51,837,000 in FY 96 under O&M General, and $300,000 in GI funds for a navigation improvement study to include anchorage areas, we recommend that the Corps be funded to its full capability for these two items in FY 97.

3. **MISSISSIPPI RIVER-GULF OUTLET (MR-GO), LA, MAINTENANCE DREDGING**
   Recognizing that Congress appropriated $12,054,000 in FY 96 under O&M General, we recommend that the Corps be funded an increased capability in FY 97 to include bank stabilization..

4. **MISSISSIPPI RIVER-GULF OUTLET, LA, NEW SHIP LOCK**
   Recognizing that Congress appropriated $3,200,000 in FY 96 construction funds, we recommend that the Corps be funded to full capability in FY 97 for the IH-NC New Ship Lock which is essential to the completion of reevaluation studies and initiation of detailed design studies.

5. **MISSISSIPPI RIVER OUTLETS AT VENICE, LA**
   Recognizing that Congress appropriated $1,645,000 in FY 96 under O&M General, we recommend that the Corps be funded an increased capability in FY 97 for continued maintenance of these critical east-west navigation channels (Baptiste Collette and Grand and Tiger Pass).

6. **INTRACOASTAL WATERWAY LOCKS, LA**
   We urge approval of GI funds for FY 97 to address the need for and the timing of the replacement of Bayou Sorrel Lock on the GIWW, Morgan City-to-Port Allen alternate route. These funds, along with FY 96 carry-over funds, will be used to continue the feasibility study.

7. **RED RIVER WATERWAY, MISSISSIPPI RIVER TO SHREVEPORT, LA**
   Recognizing that Congress appropriated $16,673,000 for substantial completion of this vital project and $9,714,000 for operations and maintenance in FY 96, we recommend that the Corps be funded to full capability in FY 97. It is essential that completion of work already underway on this project -- ultimately to result in stimulating economic growth along the Red River Basin and increased cargo movements for Louisiana ports be funded..

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February 27, 1996

Testimony of George E. Duffy, Chairman of the Governor's Task Force on Maritime Industry before the House Appropriations Subcommittee on Energy and Water Development on February 27, 1996 .

Mr. Chairman:

I am George E. Duffy, Chairman of the Governor's Task Force on Maritime Industry. I am here to testify on behalf of the ports on the lower Mississippi River and the maritime interests related thereto of the State of Louisiana. I am accompanied here at the table by Captain Clifford Clayton, President of the New Orleans-Baton Rouge Pilots and Vice Chairman of the Board of Commissioners of the Port of New Orleans; Mr. Channing Hayden, President of the New Orleans Steamship Association; Captain John Levine, President of the Associated Branch Pilots; and Captain Mark Delesdernier, President of the Crescent River Port Pilots. In addition, I would like to ask other accompanying members of our delegation to stand.

The Mississippi River from the Gulf of Mexico to Mile 232 AHP is a 45-foot deep channel. The district Engineer of the U.S. Army Corps of Engineers, New Orleans District recently released the preliminary Corps' cargo tonnage figures for consolidated ports of South Louisiana for 1994. These ports are those that makeup the deepwater ports on the lower Mississippi River from Baton Rouge to the Gulf of Mexico. A grand total of 409 million tons of foreign and domestic waterborne commerce moved on this 232 miles of the Mississippi River in 1994. The deepening of the Mississippi River several years ago certainly was a factor in the deepwater ports on the lower Mississippi River improving their tonnage statistics. Thanks to Congress and the efforts of the New Orleans District, we feel that we now are in a more competitive position with the import/export bulk ports of the world. That position of strength in trade is essential to our nation's very well-being when one considers that foreign trade has been, and continues to this day, a sustaining force behind our country's growth. Ninety-one percent of our foreign merchandise trade by volume - and two-thirds of it by value - moves in ships. With 20.4 percent of the nation's foreign waterborne commerce passing through the ports of Louisiana, the State of Louisiana has had a profound influence on employment, plant construction and access to worldwide markets.

We believe our Louisiana ports have a distinct advantage in access to foreign markets at competitive transportation costs. In order to handle the waterborne commerce, hundreds of barge lines serve our nation's inland waterways. In the lower Mississippi River region, over 100,000 barges pass through the Port of New Orleans annually, handling the waterborne commerce of the area. To carry the cargo between New Orleans and its trading partners throughout the world - serving, for example, more than 150 countries - approximately 2,500 vessels, operated by more than

60 steamship lines, call at the port in a year's time. These trading partners and percentages of trade are Europe (26.2 percent), Latin America (36.5 percent), Asia (30.2 percent) and Africa (10 percent).

It is undeniable that the New Orleans area plays a vital role in international commerce of this nation. In 1994, the lower Mississippi River (Baton Rouge to the Gulf of Mexico) handled 184 million tons of foreign waterborne commerce. Worth $29.6 billion, this cargo represented nearly 17.8 percent of the nation's international waterborne trade. Bulk cargo accounted for 90 percent of this volume, primarily the result of tremendous grain and animal feed exports and petroleum imports. More specifically, over 41.2 million tons of grain coming from 17 states and representing 51 percent of all U.S. grain exports entered the world market via the 10 grain elevators and midstream transfer capabilities on the lower Mississippi River. This same port complex received 52.9 million short tons of petroleum and petroleum products in 1994, approximately 13.6 percent of the U.S. waterborne imports of petroleum products.

Also in 1994, public and private facilities under the jurisdiction of the Board of Commissioners of the Port of New Orleans handled 59.7 million tons of foreign cargo worth $14.7 billion (included in lower Mississippi River statistics). Of this amount, general cargo tonnage totaled 10.4 million tons (major commodities: iron and steel products, rice, paper products, coffee and crude rubber). Although the volume of bulk cargo statistically dwarfs the amount of general cargo handled, the significance of the port in the movement of general cargo should not be overlooked. The Port of New Orleans consistently ranks in the top seven general cargo ports in the country. Furthermore, per ton, general cargo is very valuable to the community as it produces a greater local economic benefit than does bulk cargo.

While the port's foreign market is worldwide, its domestic market is primarily mid-America, the heartland of the United States. This heartland region currently produces 60 percent of the nation's agricultural products, ½ of all of its manufactured goods, and 90 percent of the country's machinery and transportation equipment. Waterborne commerce from this region is projected to reach 800 million tons by the year 2000.

Essential to our national economy is the continued growth and development of the lower Mississippi River regional complex. Most major trading nations of the world have deep draft ports and are in the process of developing more. With the passage of the Water Resources Development Act of 1986, United States ports are on the way to becoming more competitive in the world marketplace.

By the end of December 1988, the Corps had completed the initial construction dredging of the 45-foot channel from the Gulf of Mexico to Mile 181 AHP, thereby capturing the majority of estimated benefits attributed to the deeper channel. In fact, nine of the 10 active grain elevators and four floating grain elevators that serve the vast mid-American, agricultural hinterland are reasonably assured of a minimum safe channel depth of 45-feet. Remaining yet for total first phase completion of the project are the project mitigation features. We understand that funds are currently available for the Fiscal Year 1996 work. We urge continued support for this effort which is part of approximately $15 million in payments to the State of Louisiana to construct a pipeline and pumping stations for delivering potable fresh water to communities affected by saltwater intrusion. The State of Louisiana signed the agreement in May, 1993 which relieves the Corps from the responsibility for barging fresh water to the parish every year. The Local Cooperation Agreement for phase two dredging of the river to 45 feet from Mile 181 to Mile 232 was signed in September, 1993 allowing construction to go forward. This important project was completed in December 1994. We urge the Corps to proceed with design studies for Phase III which will allow us to proceed with the further deepening of the river to the 55-foot authorized depth.

In 1994, the Port of Baton Rouge handled 86.2 million tons to retain its position as the fourth largest port in the nation. Most ports on the lower Mississippi River are dependent upon timely and adequate dredging of the Southwest Pass to provide access to the Gulf. Judging from past experiences with spring thaws bringing higher river stages and higher rates of siltation, and recognizing that Congress appropriated $51,837,000 in FY 96 under O&M General, we recommend that the Corps be funded to its full capability in FY 97 for Maintenance of the 45-foot project channel which provides deep draft access to the deep draft ports on the lower Mississippi River from Baton Rouge to the Gulf. This funding includes monies for both dredging and repairs to foreshore dikes, repairs to lateral dikes, marsh creation and bank nourishment. Revetment construction has reduced the number and size of available deep draft anchorages. To mitigate this, we recommend that the Corps be authorized to construct new anchorages and maintain new and existing anchorages to accommodate increased ship traffic under the O&M General appropriation.

We are equally concerned with maintaining adequate depths and channel widths in the Mississippi River-Gulf Outlet Channel that is responsible for 85 percent of all container cargo in the State of Louisiana; and generates an annual economic impact of well over a billion dollars. Recognizing that Congress appropriated $12,054,000 in FY 96 under O&M General, we recommend that the Corps be funded an increased capability in FY 97 for this project. This will permit annual maintenance dredging and allow bank stabilization on the north bank. This project also provides deep draft access to the Port of New Orleans. Incidentally, in 1994, the 623 general cargo vessels calling on the MR-GO Tidewater facilities accounted for 30.1 percent of the general cargo tonnage handled over public facilities at the Port of New Orleans.

Recognizing that Congress appropriated $3,200,000 in FY 96 construction funds, we recommend that the Corps be funded to full capability in FY 97 for the IH-NC New Ship Lock which is essential to the completion of reevaluation studies and initiation of detailed design studies.

The operation and maintenance features of the Mississippi River Outlets at Venice, Louisiana are fundamental in providing safe and essential offshore support access to energy-related industries. In addition to routine traffic, Baptiste Collette Bayou is occasionally used by shallow draft vessels as an alternate route between the MR-GO and the Mississippi River. Recognizing that Congress appropriated $1,645,000 in FY 96 under O&M General, we recommend that the Corps be funded an increased capability in FY 97 for continued maintenance of these critical east-west navigation channels, Baptiste Collette and Grand and Tiger Pass.

We urge approval of GI funds for FY 97 to address the need for and the timing of the replacement of Bayou Sorrel Lock on the GIWW, Morgan City-to-Port Allen alternate route. These funds, along with FY 96 carryover funds, will be used to continue the feasibility study.

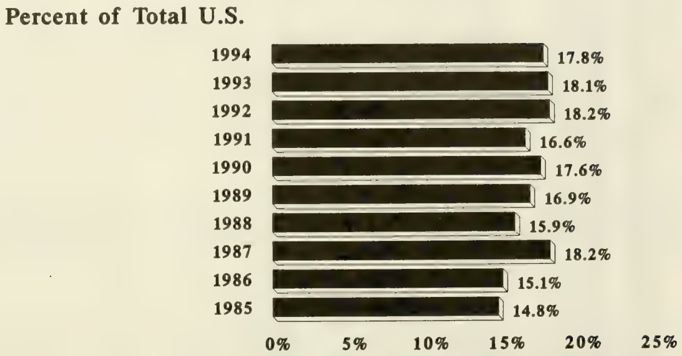
Recognizing that Congress appropriated GI funds in the amount of $300,000 in FY 96 for the Corps to initiate a reconnaissance study of the long-term improvements needed for navigation on the Mississippi River and its outlets between Baton Rouge, LA, and the Gulf of Mexico to include anchorage areas, we recommend that the Corps be funded to full capability in FY 97 to complete the reconnaissance study.

In closing, I would like to speak to one more project that deserves our attention; that is, the Red River Waterway, Mississippi River to Shreveport, Louisiana Project, providing for 236 miles of navigation improvements, 225 miles of channel stabilization works, and various recreational facilities. Recognizing that Congress appropriated $16,673,000 for substantial completion of this vital project and $9,714,000 for operations and maintenance in FY 96, we recommend that the Corps be funded to full capability in FY 97. It is essential that completion of work already underway on this project -- ultimately to result in stimulating economic growth along the Red River Basin and increase cargo movements through the Port of New Orleans be funded.

Mr. Chairman, this concludes my statement and I thank you.

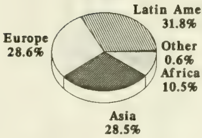
I will be followed by Captain Clifford Clayton, Vice Chairman of the Board of Commissioners of the Port of New Orleans, Mr. Canning Hayden, President of the New Orleans Steamship Association, Captain John Levine, President of the Associated Branch Pilots and Captain Mark Delesdernier, President of the Crescent River Port Pilots.

LOWER MISSISSIPPI RIVER
FOREIGN WATERBORNE COMMERCE
CALENDAR YEARS 1985 - 1994

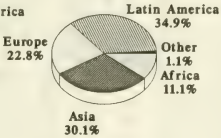


SOURCE: U.S. Dept. of Commerce

LOWER MISSISSIPPI RIVER
FOREIGN WATERBORNE COMMERCE
CALENDAR YEAR 1994



Dollar Value
By World Area



Tonnage
By World Area

Dollar Value (millions)

Principal Countries:	
Japan	$ 3,018
Mexico	1,975
Venezuela	1,720
Taiwan	1,661
Netherlands	1,498
All Others	19,704
Total	$ 29,576

Tonnage (000's of short tons)

Principal Countries:	
Japan	19,936
Mexico	18,230
Venezuela	17,670
Saudi Arabia	8,707
Taiwan	8,284
All Others	111,117
Total	183,944

SOURCE: U.S. Dept. of Commerce

LOWER MISSISSIPPI RIVER *

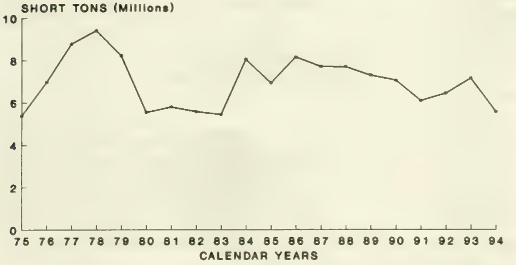
PRINCIPAL COMMODITIES 1994

IMPORTS 91,781,651 Short Tons		EXPORTS 92,161,944 Short Tons	
Petroleum & Petroleum Products	57,869,348	Cereal & Cereal Prods.	41,154,128
Iron and Steel	10,333,315	Oilseeds & Oleaginous Fruit	15,202,295
Metalliferous Ores	7,702,362	Animal Feeds	12,061,819
Fertilizers	6,207,810	Coal, Coke & Briquettes	9,579,444
Nonmetallic Mineral Manuf.	1,801,773	Petroleum & Petroleum Products	7,490,018
Gas, natural and manuf.	1,555,427	Chemicals	2,118,890
Coal, Coke and Briquettes	1,259,378	Animal/Vegetable Oils	1,402,198
All Others	5,052,238	All Others	3,153,152

* FOREIGN WATERBORNE COMMERCE

SOURCE: U.S. Dept. of Commerce

MISSISSIPPI RIVER GULF OUTLET
CALENDAR YEARS 1975 - 1994
BULK AND GENERAL CARGO TONNAGE



Source: U.S. Army Corps of Engineers

Mississippi River Gulf Outlet
Facts and Comparisons

- Responsible for over three million tons of international general cargo.

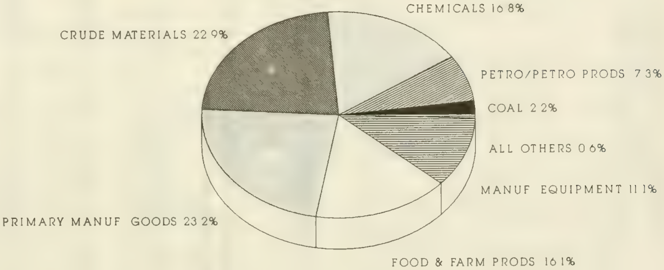
- Represents almost 30% of the total general cargo of the Port of New Orleans.

- Responsible for 85% of all the container cargo in the State of Louisiana.

- Moves more general cargo than Gulfport and Tampa combined.

Source: Port of New Orleans

MISSISSIPPI RIVER GULF OUTLET
1994 TOTAL WATERBORNE COMMERCE COMMODITY PROFILE



Sources: U.S. Army Corps of Engineers,
Port of New Orleans

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Mr. CLAYTON. Mr. Chairman, I will be brief. We fully support—from the Port of New Orleans, which I am representing at this particular hearing, we support Mr. Duffy's input. Additionally, let me make a very brief statement from someone who deals with this daily.

I deal with permits and permit requests and industry expansion, et cetera. When the 45-foot channel was completed two years ago in a process between New Orleans and Baton Rouge, which was a big project you all funded, it immediately spurred a growth in industry in the upper river corridor. The reason I know that is, I dealt with what would come from that as far as approving permits and getting them through.

Many times I am sure you do things and you are not quite sure, other than a little testimony or something written, what the results are, but let me assure you the dredging projects in Louisiana have absolutely over the years made us a front-runner in the world in marine trade.

I would like to thank you from both the Port of New Orleans and our own organization that you have a gentleman like Mr. Bevill and Mr. Myers that have been doing this a long time. The results have been astounding. I think you can be proud of the efforts you have done, and we thank you for it.

Mr. DUFFY. Next we will have Captain Mark Delesdernier.

Mr. DELESDERNIER. Mr. Chairman, I will be brief also. But not to be redundant with what Mr. Duffy has already said, I wrote an introduction which was presented in my written statement and I would like to cover that.

The Mississippi River lies at the heart of what is America, and more than any other natural feature, it is unmistakably a symbol of the Nation. The Mississippi River is the largest and longest river in North America. Its tributaries spread throughout the central United States, with a drainage basin comprising 41 percent of the continental United States, an area totaling 1.25 million miles. The drainage basin is defined on the east by the Appalachian Mountains and on the west by the Rocky Mountains. Thirty states and two provinces in Canada have their ties to this river drainage basin.

In 1996, nearly 600,000,000 tons of cargo will move on the Mississippi River between Minnesota and the Gulf of Mexico. More than 400,000,000 tons of this cargo will be foreign and domestic waterborne commerce which will move between Baton Rouge and the Gulf of Mexico.

I guess what I am saying is that we have a lot of other Congressmen that have States that need to work with us in accomplishing our goal, because we are on the bottom end of all this and we are getting all their silt. We have to get rid of it, and we need your help to get rid of it.

I support the funding of the full capabilities of the Corps of Engineers. Thank you very much for hearing us today.

Mr. MYERS. Thank you.

[The statement of Mr. Delesdernier follows:]

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Testimony of Mark Delesdernier, Jr., President, Crescent River Port Pilots Association for the Port of New Orleans, before the House Energy and Water Development Subcommittee on Appropriations on February 27, 1996 in Reference to Projects on the Lower Mississippi River and the Mississippi River Gulf Outlet

INTRODUCTION

The Mississippi River lies at the heart of what is America, and more than any other natural feature is an unmistakable symbol of this nation.

The Mississippi River is the largest and longest river in North America. Its tributaries spread throughout the Central United States, comprising a drainage basin encompassing 41% of the continental United States - an area totaling 1.25 million square miles. The drainage basin is defined on the east by the Appalachian Mountains and on the west by the Rocky Mountains. Thirty states and two Providences in Canada have ties to the Mississippi River drainage basin.

In 1996, nearly 600,000,000 million tons of cargo will move on the Mississippi River between Minneapolis and the Gulf of Mexico. More than 400,000,000 million tons of foreign and domestic waterborne commerce moved between Baton Rouge, Louisiana and the Gulf of Mexico in 1994.

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Mr. Chairman:

I am Mark Delesdernier, Jr., President of the Crescent River Port Pilots Association for the Port of New Orleans, Louisiana.

The Crescent River Port Pilots is an Association of 93 Pilots that was founded in 1908. This Association pilots ships on 100 miles of the Mississippi River and 40 miles on the Mississippi River Gulf Outlet. In 1995, our total ship movements exceeded 15,000 thousand.

The Crescent River Pilots have shoaling on the lower end of their route on the Mississippi River which required the Corps of Engineers to constantly dredge shifting sand bars.

In 1995, the Crescent River Pilots piloted nearly 12,000 thousand ships that transited Southwest Pass, the area of the Mississippi River that requires the greatest effort on the Corps of Engineers to maintain a project depth of 45 feet.

Larger vessels now calling on Louisiana Ports are a direct result of the Corps of Engineers maintaining a project depth of 45 feet in the Lower Mississippi River System.

The 45 foot Channel has generated a substantial increase in tonnage moved through the Lower Mississippi River System. The training works to control the Channel was well designed. The Corps of Engineers continue to do an excellent job in maintaining the Channel to project depth.

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The International Shipping Community constantly monitor the maximum draft recommendations on the Lower Mississippi River. Large ships take advantage of the project depth and tide allowing them to transit the Lower Mississippi River carrying greater tonnage making the voyage more profitable.

Hopefully, the Congressional Delegations of all states shipping through the Mississippi River System will help with the necessary appropriations to maintain and deepen this great river which benefits the entire United States.

Additionally, I want to comment on the east-west Navigation Channels at Venice, Louisiana. Tigers Pass and Baptiste Collette provide a shorter route to the Gulf of Mexico and Briton Sound. These east-west routes are important to the oil industry in saving time but additionally the vessels that use these channels relieve some of the congestion in the main ship channel which is one of the most congested waterway in the country. Funding for dredging is very important to maintain these two channels for the reasons mentioned above.

The Crescent River Pilots also pilot on 40 miles of the Mississippi River Gulf Outlet (MRGO). This man-made channel is 75 miles long starting in Breton Sound and ending in New Orleans. This channel services the container terminals for the Port of New Orleans. Additionally roll on, roll off terminals and bulk terminals are located on (MRGO). For the Port of New Orleans to remain competitive in the expanding container trade, the continued maintenance of this channel is extremely crucial. Last year more than 700 ships called on the Port using (MRGO).

The long range plans for the Mississippi River Gulf Outlet is questioned by environmental groups. There is a salt water intrusion and erosion problem in MRGO, but any curtailment of shipping traffic in the channel without regards to the long term effect upon the Port of New Orleans would be a disaster. Container cargo is very high in value and I feel very strong about approving of funds for maintenance dredging and jetty repair projects. Additionally, I support the erosion Rip-Rap Study for the MRGO.

For members of Congress that represent coal mining states, the Mississippi River System has exported approximately 13,000,000 million tons of coal a year for several years, which makes a significant contribution towards the balance of trade between the United States and other nations.

The Corps of Engineers funding for projects on the Lower Mississippi River System is money well spent. A reliable 45 foot draft has increased imports and exports. I urge your support for funding the Corps of Engineers which will enable the Corps to continue to maintain and improve the most productive waterway system in the world.

Mr. Chairman, this concludes my statement. Thank you for the opportunity to appear before the subcommittee. I will be happy to respond to questions.

Mr. DUFFY. Mr. Chairman, Mr. Channing Hayden from the New Orleans Steamship Association will present the last testimony.

Oh, I'm sorry, I apologize. Captain Jack Levine.

Mr. LEVINE. Thank you. Thank you, Mr. Chairman.

To be brief, I will also say we are here to support the full funding of the capabilities for the Corps and the wing dams and the rocks that Mr. Duffy mentioned that are part of the original 45-foot project where they put some extra wing dams and extra rocks alongside the river to create a self-scouring action to keep the current in the middle. It has been very successful, but it is 10 years old, and the rocks tend to sink down in our area. We don't really wash them away; they do sink.

Again, we appreciate all you have done for us in the past. 1995 was the busiest year in shipping since 1979. We had a little downfall, but things are coming back. Business is good down there, and we appreciate all the help you have given us in the past and hope we can continue to get it. Thank you.

Mr. DUFFY. Now Mr. Channing Hayden.

Mr. MYERS. Again?

Mr. DUFFY. Again, yes, sir.

Mr. MYERS. We just heard from him.

Mr. DUFFY. He is never that brief.

Mr. HAYDEN. Mr. Chairman, I am Channing Hayden. I am President of the New Orleans Steamship Association. The Association supports the statements of the Governor's Maritime Task Force, the Port of New Orleans and the pilots. Being as our written statement is going to be put in the record, in the interest of time, I would like to focus on a proposal to use budgeting Corps funds more effectively.

In some past years the New Orleans district has not expended all appropriated funds available for the Mississippi River Navigation Project because nature was unusually kind to us. In such years the Corps should have the flexibility to use already appropriated funds for other worthwhile projects in the district.

We recommend clarifying that the appropriation includes the following work within the Corps's budget when funds become available: To create and enhance wetlands we suggest mining sediment from Pass A Loutre and the Pilottown Anchorage. Eight hundred thousand cubic yards of material dredged would create 115 acres of wetlands and enhance 256 more acres.

In the process, much-needed Pilottown Achorage would be dredged to accommodate the increasing number of deeply laden ships attracted by the 45-foot channel. To maintain the deep-draft navigation channel more efficiently we suggest that the Corps be allowed to conduct research studies on prototype dredging techniques. Experimental dredging wouldn't substitute for routine dredging, but would allow for such things as testing dustpan dredges and the new private equipment such as the dredge beachbuilder in Southwest Pass and the crossings above New Orleans.

To mitigate the encroachment of protective levee revetments on anchorages, we suggest the Corps be allowed to construct and maintain new anchorages to accommodate deep-draft ships. I can't emphasize enough that these projects would be accomplished within the Corps' budget and only when resources were available. These authorizations should be effective for fiscal year 1996 and all subsequent years that funding is available.

We strongly urge your support for the more efficient use of Corps funds in the New Orleans district. I would like to add my thanks for your help in the past. Thank you for letting me be here today, and I will be happy to answer any questions.

Mr. BEVILL. Thank you for your fine presentation, as you do each year. It has been great working with you. The Chairman and I will continue working with you until January the 3rd.

Mr. MYERS. We are not going to forget you then. You will have more important people then. We will still be watching them. Thank you for your testimony.

[The statements of Mr. Levine and Mr. Hayden follow:]

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TESTIMONY OF JOHN LEVINE, JR., PRESIDENT, ASSOCIATED BRANCH PILOTS FOR THE PORT OF NEW ORLEANS, BEFORE THE HOUSE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS ON FEBRUARY 27, 1996 IN REFERENCE TO PROJECTS ON THE LOWER MISSISSIPPI RIVER AND THE MISSISSIPPI RIVER GULF OUTLET.

Mr. Chairman:

I am John Levine, Jr., President of the Associated Branch Pilots, the Bar Pilots for the Port of New Orleans, Louisiana.

The Associated Branch Pilots is an Association of pilots that have been guiding oceangoing vessels into the entrances of the Mississippi River system for over 125 years. We are called Bar Pilots because we guide the ships past the constantly shifting and shoaling sand bars in the area.

Southwest Pass of the Mississippi River is the main entrance for deep draft oceangoing vessels entering the Lower Mississippi River System. It is the shallowest stretch of the Lower Mississippi River System and the area that requires the greatest effort by the Corps of Engineers to maintain project depth.

In 1995, the Associated Branch Pilots made 11,458 transits on oceangoing vessels through Southwest Pass. Of these ships, 3,991 were of 50,000 deadweight tons or greater and 677 had a draft in excess of 40 feet.

This number of heavily laden vessels calling on the Lower Mississippi River System is a direct result of the completion by the Corps of Engineers of the deepening of the channel from 40 feet to 45 feet.

This first phase has proven to be extremely well designed and well maintained by the fact that the maximum draft recommended by my Association for vessels using Southwest Pass has been 45 feet or greater, except a two and a half month period during the high river of 1994, since May 18, 1989. This is in stark contrast to the late 1970's and early 80's when we often had to recommend drafts less than the project depth due to shoaling.

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To the world shipping community, this means that calling at ports on the Mississippi River system will be more profitable because larger ships can enter and carry greater amounts of cargo.

This is beneficial to the entire United States because it makes the large quantities of petroleum, agricultural, and manufactured products shipped from the Mississippi Valley more desirable due to increased profitability.

I would also like to comment briefly on the East-West navigation channels near Venice, Louisiana. Tiger Pass and Baptiste Collette provide a shorter, more direct route to Breton Sound and the Gulf of Mexico for offshore supply boats and small tugs and barges. These channels not only represent a savings in time and money for these vessels, but reduce the traffic in the main shipping channel, the Mississippi River and its passes, which is one of the most congested waterways in the country.

The Associated Branch Pilots also pilot vessels in the Mississippi River Gulf Outlet, a man-made tidewater channel 75 miles long, stretching from the Gulf of Mexico to an intersection of the Intercoastal Waterway in New Orleans.

This channel leads to the Main Container Terminals for the Port of New Orleans, the Roll On, Roll Off Terminal, the Port of New Orleans Bulk Handling Plant, and additional General Cargo Docks. For the Port of New Orleans to remain competitive in the ever growing container trade, the continued maintenance of this channel is crucial. In 1995, 700 ships called on the port using the Mississippi River Gulf Outlet.

Much is being said pro and con concerning the Mississippi River Gulf Outlet. There is, admittedly, an erosion problem in the Mississippi River Gulf Outlet, but any curtailment of shipping traffic in the channel without regard to the long term effect upon the Port of New Orleans would be disastrous. I strongly support approval of funding for both the maintenance dredging/jetty repair project and the erosion/riprap study for the Mississippi River Gulf outlet.

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I would also like to make a brief statement on behalf of the Mississippi Valley Coal Export Council. Over 62 million tons of coal have been exported using the Mississippi River System during the past five years. Coal miners, tugboat captains, barge owners, shippers and many other coal related workers have benefited by using the consistent and efficient Mississippi River System. This also represents a significant contribution towards the trade balance between the United States and other industrialized nations.

Funding of the Corps of Engineers projects in the Lower Mississippi River System has proven to be money well spent. It has increased exports and imports that have benefited the entire United States. I urge your support of the funding requested to enable the Corps to continue to maintain and improve the most efficient and productive waterway system in the country.

Mr. Chairman, this concludes my statement. Thank you for the opportunity to appear before the Subcommittee. I will be happy to respond to any questions the Subcommittee may have.

CHANNING F. HAYDEN, JR., PRESIDENT AND CHIEF EXECUTIVE OFFICER
WIN NIEMAND, VICE-PRESIDENT - LABOR RELATIONS
ROSE D. DOLES, EXECUTIVE SECRETARY

ANTHONY J. SAMONA, JR., CHAIRMAN OF THE BOARD
ROY M. GONZALEZ, VICE CHAIRMAN OF THE BOARD
PATRICK M. MORRISSEY, TREASURER

new orleans steamship association

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Summary of testimony of Channing F. Hayden, Jr., President of the New Orleans Steamship Association, before the House Energy and Water Development Subcommittee on Appropriations at 2:40 p.m. on Tuesday, February 27, 1996, in reference to projects of public interest on the lower Mississippi River from its mouth to Baton Rouge.

1. MISSISSIPPI RIVER SHIP CHANNEL, GULF TO BATON ROUGE, LOUISIANA (CONSTRUCTION GENERAL)
   We recommend continuation of the work on the saltwater intrusion mitigation plan and the design studies for Phase III of the 55-foot channel. We understand that funding is expected to be available in FY97 to perform both tasks.

2. CHANNEL STABILIZATION AND MAINTENANCE DREDGING OF SOUTHWEST PASS AND MAINTENANCE DREDGING OF THE MISSISSIPPI RIVER FROM BATON ROUGE TO THE GULF, PLUS GENERAL INVESTIGATION OF THE RIVER AND ITS OUTLETS BETWEEN BATON ROUGE, LOUISIANA, AND THE GULF OF MEXICO
   Recognizing that $51,837,000 was appropriated by Congress in FY96 under O&M General, with GI funds of $300,000 in FY96 for a reconnaissance study to improve navigation needs, we urge that the Corps be funded to its full capability in FY97 under O&M General to permit dredging and dike maintenance work, and also fund to full capability in FY97 to complete the reconnaissance study for authorization to construct and maintain anchorages.

3. THE MISSISSIPPI RIVER-GULF OUTLET MAINTENANCE DREDGING AND BANK EROSION
   Recognizing that $12,054,000 was appropriated by Congress in FY96 under O&M General, we urge that the Corps be funded an increased capability in FY97 to maintain this channel, including bank stabilization on the north bank, and that GI funds for FY97 be approved, along with FY96 carry-over funds, to continue the feasibility phase of a bank erosion/riprap study, as well as providing anchorages to improve navigation on this channel.

4. MISSISSIPPI RIVER-GULF OUTLET, LOUISIANA, NEW SHIP LOCK
   Recognizing that $3,200,000 was appropriated by Congress in FY96 construction funds, we recommend funding for the Corps' full capability in FY97 construction funds proposed for the IH-NC New Ship Lock, which are essential to the completion of local reevaluation studies and initiation of detailed design studies.

5. RED RIVER WATERWAY, MISSISSIPPI RIVER TO SHREVEPORT, LOUISIANA
   It is essential that completion of work already under way on this project -- ultimately to result in stimulating economic growth along the Red River Basin and increase cargo movements through the Port of New Orleans -- be funded. Recognizing that Congress appropriated $16,673,000 for substantial completion of the vital project and $9,714,000 for operations and maintenance in FY96, we strongly recommend that the Corps be funded to full capability for FY97.

CHANNING F. HAYDEN, JR., PRESIDENT AND CHIEF EXECUTIVE OFFICER
WIN NIEMAND, VICE-PRESIDENT LABOR RELATIONS
ROSE D. DOLES, EXECUTIVE SECRETARY

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Testimony of Channing F. Hayden, Jr., President of the New Orleans Steamship Association, before the House Energy and Water Development Subcommittee on Appropriations at 2:40 p.m., Tuesday, February 27, 1996, in reference to the projects of public interest on the lower Mississippi River from its mouth to Baton Rouge.

Mr. Chairman:

My name is Channing Hayden, and I am President of the New Orleans Steamship Association. Our Association is comprised of some 53 ship owners, operators, agents, and stevedores representing the majority of the 6,000+ deep-draft vessels in foreign commerce that call Louisiana Mississippi River ports each year. We are dedicated to the safe and efficient movement of maritime commerce through the state's river ports from the Gulf to Baton Rouge. We endorse the statements made today by the Governor's Task Force on Maritime Industry, the New Orleans-Baton Rouge Pilots, the Board of Commissioners of the Port of New Orleans, the Crescent River Port Pilots, and the Associated Branch Pilots. The projects we all support impact the nation in jobs and the country's ability to compete in world markets. They should be funded as noted in our summary.

Channel stabilization and maintenance dredging in Southwest Pass are critical to keep project draft. Project draft ensures the Mississippi River's deep-water ports will handle the country's foreign waterborne commerce in the most cost-effective way possible.

For years we have urged this Committee to provide funds to maintain project draft at Southwest Pass. You have responded, and your wisdom has benefitted the entire American heartland served by the Mississippi River System. Southwest Pass was greatly restricted throughout the '70s. From 1970 to 1975 the channel was at less than project draft 46 percent of the time. In 1973 and 1974 the channel was below the 40-foot project draft 70 percent of the time. During some periods, drafts were limited to 31 feet. Fortunately, those conditions have not recurred because of a combination of factors: your help and the constant vigilance of the Pilots, the Corps, and the maritime community. The years 1990 through 1995 show a tremendous improvement in channel stability. We have been at or above project draft 96 percent of the time for vessels under 100,000 deadweight tons and 93 percent of the time for vessels 100,000 deadweight tons or greater. The funding you provided was money well spent. The repairs to the jetties and dikes and the Corps' ability to rapidly respond to shoaling have been instrumental in maintaining project.

In this regard, it is critically important that you fund the Corps to its full capabilities for needed repairs of the Southwest Pass pile dikes and the foreshore rock dikes from Mile 0.5 AHP to Mile 0.8 BHP. Both of these projects represent an investment that will cause the river to scour itself and reduce the cost of maintenance dredging.

The Pilots have taken advantage of tidal flows and other factors to recommend the maximum draft possible consistent with navigational safety. Five years ago we set a new record with draft recommendations of 49 feet for vessels under 100,000 deadweight tons and 48 feet for those over 100,000 deadweight tons, an eight- to nine-foot improvement over the old 40-foot project draft and four to five feet over the authorized project. Twelve inches to a large vessel with a loading capacity of 250 tons per inch is an additional 3,000 tons of cargo. Freight rates for grain moving from the Mississippi River to the Far East are around $26.25 per ton and about $17.00 a ton to Europe. Using an average rate of $21.63, each foot of draft represents an additional $64,875 in vessel revenue, or $519,000 for eight additional feet over the old 40-foot project draft. It also represents additional sales of U.S. products and increased competitiveness for those products on the world market. Industry's partnership with you has kept Mississippi River ports competitive. The current draft at Southwest Pass is 46 or 47 feet, depending on the size of the ship -- still above the authorized project.

The funding we are requesting for maintenance dredging and other works are essential for the Corps of Engineers to maintain a reliable channel and allow them to speedily respond to potential problems. This builds the confidence of the bulk trade in a reliable draft on the Mississippi River, which is critically important. Much of Louisiana's bulk trade is export agricultural products and coal. These export commodities are neither captive to Louisiana nor the United States if they can be shipped from competing countries at a consistently lower cost.

The deeper the channel, the more important channel stabilization is. By ensuring adequate channel stabilization work, the maintenance cost of the deeper channel is minimized. If recurring maintenance dredging can be minimized by investing in stabilization, then the investment is cost effective. The faster the 45-foot project is stabilized, the faster and greater the benefits of reduced O&M costs will be realized.

Funds are also needed for dustpan dredges to work the crossings above New Orleans. These crossings control the draft to eight of our ten major grain elevators, plus many mid-stream loading facilities. This area caters to the bulk trade and must have a stable channel depth that coincides with the depth at Southwest Pass. Only two dredges in the world are available to maintain the deep-draft crossings between New Orleans and Baton Rouge. (One to two more may be needed to reliably maintain the new 45-foot channel above New Orleans.)

The Corps of Engineers is studying the makeup of their "minimum fleet"--the number of dredges the Corps owns and operates. Corps-owned dredges working the lower Mississippi River are the hopper dredges WHEELER, MACFARLAND, and ESSAYONS, and the dustpan dredge JADWIN. The WHEELER and MACFARLAND, and from time to time the ESSAYONS, provide a much-needed capacity and immediate response to keep Southwest Pass opened, especially when the river is abnormally high. To reduce government hopper dredges may drastically diminish the Corps' ability to maintain reliable project dimensions and adversely affect our country's standing in world bulk markets. The JADWIN is one of two dustpan dredges *in the world* capable of working the crossings between New Orleans and Baton Rouge. The loss of this dredge could close the upper river to deep-draft ships, causing serious economic repercussions.

For all of the above reasons, we request full funding for the mitigation features of the 45-foot project and for O&M General.

In December, 1994, the Corps completed the 45-foot deep channel to the Port of Baton Rouge. It minimizes past problems of different loading criteria for the ports on the lower Mississippi River. Proper maintenance will now provide for draft uniformity and avoid confusion to foreign shippers and ocean carriers when negotiating charters. This will provide a better posture to promote U.S. export trade through Louisiana, and adequate federal maintenance funds to keep the channel open must be available. In addition, the Corps needs authorization to construct and maintain anchorages to improve safety. Over the years, revetment work and changes in the river itself have caused serious negative impacts on our anchorages. Therefore, we encourage funding to full capability in FY97 to complete the reconnaissance study to improve navigation needs on the Mississippi River and its outlets between Baton Rouge, Louisiana, and the Gulf of Mexico.

The growth of the Port of New Orleans depends, in large measure, on the Port's container and other facilities on the Mississippi River-Gulf Outlet. This channel has been severely restricted in depth and width. The funds you have provided have allowed the Corps to improve the channel considerably. Despite the Corps' best efforts, the channel width is still limited primarily because of erosion. This seaway has a project depth of 36 feet. For safety reasons in this narrow channel, restrictions apply to vessels with a draft of 30 feet or more. Such vessels cannot meet or pass in certain areas of this channel, causing delays to the tightly scheduled container traffic using the Mississippi River-Gulf Outlet. These specialty vessels serving the Port's facilities are becoming larger. This channel, with less than stable full project dimensions, causes problems for larger vessels, reducing our ability to grow with the trade.

To improve safety on the Mississippi River-Gulf Outlet, we request Congress appropriate the Corps' full capability for the Mississippi River-Gulf Outlet. In addition, to reduce or eliminate transit restrictions and delays, holding areas or anchorages should be dredged so large ships can transit without closing the channel to other traffic. There is also the need to resolve the bank erosion problem in this channel. This could reduce cost over the long haul, enhance safety, and be environmentally beneficial. We urge approval of the Corps' full capability in GI funds for a Mississippi River-Gulf Outlet bank erosion/riprap study.

With facilities located on both the Mississippi River-Gulf Outlet and the Mississippi River, an adequate route between the two is essential for efficient transit between these facilities. The shortest route is an inefficient, antiquated lock built in the 1920s with a width of 75 feet and limited to a depth of 30 feet. Its maximum capacity has long been exceeded. The average waiting time for passage through the lock has increased from 8½ hours in 1985 to about 12 hours at present; however, we understand that waiting time can be more than a day in some instances.

A much larger ship lock is necessary to accommodate today's traffic. We urge that Congress provide the Corps' full capability for this project. This is important if this project is to be completed. Any delays are unthinkable since the new lock is long overdue. Thus, we recommend funding for the Corps to its full capability in FY97.

The Red River Waterway, Mississippi River to Shreveport, Louisiana, Project is directly related to our Port. The continuation and completion of this work will stimulate the economy all along the Red River Basin with jobs and additional international trade. This stimulated trade will service the Port of Shreveport and the ports on the lower Mississippi River, providing needed growth and benefitting the states of Louisiana, Texas, Oklahoma, and Arkansas, which are served through the Shreveport distribution center. Therefore, we strongly recommend that the Corps be funded to full capability for FY97.

TUESDAY, FEBRUARY 27, 1996.

RED RIVER BASIN PROJECTS

WITNESSES

LYNN LOWE, PRESIDENT OF THE RRVA, TEXARKANA, ARKANSAS

PHIL ALFORD, VICE PRESIDENT, ARKANSAS, LEWISVILLE, ARKANSAS

RON GLENN, VICE PRESIDENT, TEXAS, WICHITA FALLS, TEXAS

JERRY BOUGHTON, VICE PRESIDENT, LOUISIANA, SHREVEPORT, LOUISIANA

WILLIAM C. CHAPMAN, VICE PRESIDENT, OKLAHOMA, ARDMORE, OKLAHOMA

RICH BRONTOLI, EXECUTIVE DIRECTOR, BOSSIER CITY, LOUISIANA,

LARRY TAYLOR, RED RIVER WATER COMMISSION, BOSSIER CITY, LOUISIANA

Mr. MYERS. Red River. Red River Valley. We are pleased to have the Red River Association here. Basic projects. You will be the spokesman again, Mr. Boughton. The committee would be pleased to hear from you. Your prepared statements will be placed in the record. You may proceed as you would like.

Mr. LOWE. I am Lynn Lowe and I am brand new at being President of this outfit, but I am not brand-new coming here. I have seen your smiling face and the face of Congressman Bevill for too many years, really. We are sorry to hear that you are not going to be back because you have done yeoman service for our part of the world.

We represent four States, 10 of your colleagues' districts on a river that we love. This committee has been very helpful to us in developing that whole river project and the message that we have is too important for this messenger with this voice to deliver, so I have asked our Executive Director, Richard Brontoli, to present this presentation.

Mr. BRONTOLI. Mr. Chairman, it is a pleasure to be here. We are saddened that both yourselves, the Chairmen, will be leaving us. You have been a champion for water resource projects and the Nation's inland waterways. You will be sorely missed. We have a lot of work to do to educate new people on the importance of our projects.

I am going to give an overall briefing from the whole region of the Red River and each Vice President in each State will discuss the specifics in their States. We were founded in 1925 with the express purpose of uniting the citizens of the four States of Louisiana, Oklahoma, Arkansas and Texas, and I believe you have seen the fruits of what uniting the citizens of those States can do.

A lot of work has been completed and we have a lot left. I would like to comment on some of our major missions. First is navigation. We thank this committee for the support you have given in completing navigation and bringing back the dream of Captain Shreve to put the port back into Shreveport and that is a reality. Navigation now goes to Shreveport-Bossier City and we are thankful for that.

We feel that we must continue with navigation into Arkansas and eventually into Oklahoma and Texas. The local economy benefits are considerable. We feel confident that we are going to have a justified project. We are asking that we get a feasibility study. I want to stress how very few organizations come to your committee and offer you money, but we are offering to cost share the feasibility study 50 percent, which is normally for navigation a 100 percent federally funded project. We have come to offer that to have the study started in 1997.

Second, bank stabilization. We have over the years picked away at stabilizing our banks in Arkansas, Louisiana and parts of Oklahoma and Texas, and we need that to continue. Arkansas is about 85 percent complete. We ask that you continue supporting those projects as you have in the past, and get those revetments and stabilizing our prime farmlands as we have done in the past.

Flood control, the worst flooding that has hit since 1945 and 1957 was in 1990. More than 700,000 acres were flooded with a total damage estimate of $24.4 million. However, the Corps estimated that without our flood control system an additional 1.3 million acres and an estimated $330 million worth of damage would have been seen. So we request that if you continue with the levee rehabilitation that we have had ongoing in Arkansas and Texas to correct some of the deficiencies, we do have to continue that much needed protection.

Fourth is clean water. Nearly 3,500 tons of natural salts enter the Red River just west of Wichita Falls Texas. Waters in that part are unusable, and we have authorized a chloride control project in place and we request you get that project continued to move and give us the funding we need to provide that region of the country with the clean water they need for their communities, for industry and agriculture uses. Again, you will hear more specifically from our Texas Vice Presidents on the specifics of that project, which is critical to the whole four-State valley since the salts do affect a multi-State region.

I want to stress the civil work projects are one of the most effective jobs programs that we see in the Federal Government. On average we are talking 70, 80 percent of the costs of these projects comes back to the private sector in the form of contracts, construction, AE firms. Once completed, our communities are provided with these projects, the infrastructure to promote economic developments, that we can promote or own economic development opportunities, and we challenge any other Federal program that compares to these civil work projects in benefits received for the dollars spent.

Due to emergency funding of natural disasters and unprogrammed commitments, fiscal year 1996 appropriations for many of our projects have been reduced. We strongly encourage that this subcommittee introduce and that Congress pass supplemental appropriations to restore project funding to the fiscal year 1996 level. This is important so that our private sector contractors can continue with these projects and get paid for work completed without forcing projects to cease construction, which will increase costs in the long run. Thank you.

Before I introduce the Vice Presidents, I want to recognize the citizens of the four-State region that have come here with us and are sitting behind me to let you know the importance of these projects, the people of the Red River Valley region. They could stand up. It shows what the unity of four States at least at the citizen level can do. We feel it has shown the results from our projects.

Now, I would like to introduce the Vice President of Arkansas. He is a rancher from Lewisville, Arkansas, Mr. Phil Alford.

Mr. ALFORD. Mr. Chairman, as Chairman of the Red River Commission of Arkansas, I wish to thank this committee for taking the time to listen to what we have to say and we will make it real short. I would like to cover a portion of what Mr. Brontoli spoke on a minute ago. Since navigation reached Shreveport, Louisiana, 35 miles south of the Arkansas border, we would like to extend navigation into Arkansas.

We have had a recent reconnaissance survey that did not come up to the one point that was necessary, and we would like to have a feasibility study in which this Red River Commission of Arkansas, which was created by the Governor Dale Bumpers, who is now the senior Senator from Arkansas, 21 years ago. This commission is prepared to pay or contribute 50 percent of the cost of this feasibility study up to Index, Arkansas. That is how serious we are because of the economic conditions along this Red River in Texas and up into, actually into Oklahoma, Louisiana, and Arkansas, of which we feel will be a tremendous benefit to them from that standpoint. So we would like to ask the Congress to direct the Secretary of the Army to initiate a feasibility study with the local interests contributing 50 percent of the cost.

I have two or three other little things that we would like to mention. Bank caving has always been a problem in Arkansas, but due to the construction of dams upstream, which we are thankful for, don't misunderstand, it is wonderful flood control, but we have a little problem with the bank caving because the water is staying closer to half to three-quarters full, and it is causing a tremendous amount of bank caving.

We have, as Mr. Brontoli stated earlier, about 85 percent of the revetment work done in Arkansas and we lack a few little deals which in the next two or three years we should work that out and not have to ask you for any contributions on that part, we hope.

We are also into a levee program of which the 1990 flood, which was kind of a half disaster in our area, but the levees did hold except in two or three cases they were leaking so bad until if it had lasted another day or so it would have been a disaster. We are working over the levees and this is a continuing project, and that we ask you to support that program this year so that we can get ourselves where we will be able to farm in a little bit of safety.

There is a small McKinney Bayou which goes through Miller County fairly close to the City of Texarkana, which in all probability we are only asking for, is a full Corps capability and they may have the money already. We don't know for sure on that. In Little River County, Arkansas, the Secretary of the Army has directed the design initiation and construction of two bayous along the levees on the east side of the river, which will take in Texas two sides and Arkansas, and we are requesting that these funds be appropriated.

Again, let me say one thing concerning the work in Texas concerning the chloride project so that you know that we fully support the work on this chloride project which affects the full extent from one end of the river to the other and we would sure like their complete support and whatever the Texas testimony is concerning this chloride project.

Thank you, Mr. Chairman, and thank you committee members, for your attention. If you have any questions we would be glad to answer them. With your permission, Mr. Chairman, with no questions I have a plane to catch.

Mr. MYERS. Catch it. Thank you very much.

Mr. BRONTOLI. I would like now to introduce our Vice President from Louisiana, Mr. Jerry Boughton, who is a retired banker and resides in Shreveport, Louisiana.

Mr. BOUGHTON. I am Jerry Boughton, Vice President of the State of Louisiana, the Red River Valley Association. Not only do I represent the citizens of Louisiana, but we also support all the projects that my associates mentioned today.

We have several projects that I would like to emphasize and we are here to plead for your support. We think it is important that you continue to fund as far as operational maintenance funds for navigation on the Red River. There are several things there we need to complete the project. We need to continue funding to construct Federal recreation sites, locks and dams 3, 4 and 5, and that cost is to be shared with a local sponsor including boat launches and comfort stations.

We also need to initiate construction on the Eagle Bend Capout in pool 5, which will bring these dikes above the pool stage where it will be much safer for recreational boaters. Eagle Bend is within 2 miles of a major Federal boat launching. We think it would be best for safety there.

In addition, we have three revetments in Louisiana that must be reinforced to pool 1, at Hadden/Ft. Derussy revetment, the Ben Routh Revetment and Saline Revetment. We are also asking that you direct the Secretary of the Army to design and construct a regional visitor center for the Red River Valley Waterway Project in fiscal year 1996, and we ask that you direct the design and construction of a dual center, one to be located in Shreveport, and one in Natchitoches. We are asking for $4.6 million for the project.

You appropriated a million dollars in fiscal year 1997 for dredging to ensure that the oxbows in the river remain open. We are asking for funds to continue that project in the amount of a million dollars.

I fully support the testimony of our Arkansas associate to continue design and construction for revetments for bank stabilization in his area and some of what he has in his testimony has a few in northern Louisiana, Cat Island to be specific. We also are asking for full Corps capability for the Aloha-Rigolette Flood Control Project, which has been going on for many years. We don't anticipate any interference in this project. We just ask for your support there.

We have a rather serious condition developing on the existing revetments on the Red River Waterway in pool 5 adjacent to a Federal levee. We think it would be prudent to bring this up to standard before we jeopardize the integrity of this levee. We call that the 12-mile Bayou Revetment in pool 5. We are asking $600,000 there.

We have a situation known as Loggy Bayou in our area. Loggy Bayou is the final and only channel that drains a vast area of three parishes, or counties maybe to you. These counties are Webster, Beinville and Bossier Parishes in Louisiana, but the headwaters of this watershed actually starts in Columbia County, Arkansas, and there are no other diversions for this water to be drained except through this Loggy Bayou.

Many years ago the Bossier Levee District agreed to maintain its about 8 miles of Loggy Bayou before it enters the Red River, but since 1943, when that was done, we have had a lot of changes in the way the water has flowed, and now the problem has exceeded the funding and equipment and expertise of the local levee boards. So we are asking for $500,000 for the Corps to perform some clearing and grubbing to clean out the channel in fiscal year 1997.

We have another situation called the Red Chute Guideline Levee in Bossier Parish. This section of levees is in a Federal levee system, but based on a study using Corps data it does not meet the minimum 5-year standards. In 1990 the flood there, it was the only levee that we had some overtopping on, and there has been a dramatic increase in some building projects and development in this area, and we are asking for $3 million to request the Corps to increase the level of this levee at least to 100-year protection.

In addition, we also support the chloride project that has been mentioned here that is for the west reaches of Texas and Oklahoma. You will hear more about that from our Texas Associate Vice President. We think this is vital, very, very important, and we are asking for full support of that. We also, of course, are supporting vigorously the continuation of a study to bring navigation to Index, Arkansas.

I feel like I am losing a good friend when we won't have you both here next year. I think, though, that you can leave knowing that you have done a good job while you were here and we appreciate it. I would like to introduce Mr. Larry Taylor Red River Water Commission. He will provide testimony on the water projects.

Mr. TAYLOR. On behalf of the State of Louisiana and the Red River Waterway District, it is my honor and privilege to address this subcommittee on the Red River Navigation Project. Navigation from the Mississippi River to Bossier City, Louisiana, became a reality just over a year ago.

We request that funding be made available for the Corps of Engineers to complete the ongoing construction projects such as the capping out of revetments for safe navigation for both commercial and recreational users and expedite the development of recreation and mitigation projects as well as continued operation and maintenance funding for these projects. With this preface we respectfully request that you appropriate $17,000,000 for fiscal year 1997 to continue our cooperative mission of developing the Red River Valley and the Nation's infrastructure. Specific Red River Navigation projects include:

1. Recreation at locks and dams numbers 3, 4, and 5 to be cost shared by the Red River Waterway Commission and operated by the Corps.
2. Eagle Bend Capout, Hadden/Ft. DeRussy, Ben Routh and Saline Revetment reinforcements in pools 1 and 5.

3. Continued recreational development in pools 3, 4, and 5 as per the Corps Reevaluation Study.

4. Continued funding of $1,000,000 for maintenance dredging in the oxbows for recreation.

Bank stabilization, navigation feasibility studies and flood control projects throughout the Red River Valley are critical to our area. We urge you to support these efforts. These valley projects are imperative to the citizens of Louisiana, Arkansas, Oklahoma and Texas. Louisiana projects that are vitally important and funding is desperately needed at the Cat Island Revetment, Twelve Mile Bayou, Aloha-Rigolette Project, and the Bayou Rapides Flood Control Project.

We are here again today to strongly advocate support for the Red River Chloride Control Project, which is fundamental to developing usable river water for commercial, industrial and agricultural purposes. We must press forward and forge a cooperative, workable solution to this situation. The benefits to the four-State area can only be fully realized through progress in chloride abatement.

Funding of the full Corps of Engineers capability is the key to these projects remaining on track and providing the benefits to the Valley as well as to the Nation. Our main goal is to provide support for the Congress and the administration while we develop the Red River Valley to its fullest potential through a cooperative effort. Specific goals are supporting our neighboring States in their project needs and continuing our strong development efforts on the Red River through our river ports, recreation, bank stabilization and mitigation efforts. The Red River Waterway Commission has a tremendous amount of work to accomplish in the years to come so that all the goals of this project come to fruition. We appreciate testifying before you, Mr. Chairman.

Mr. BRONTOLI. I would like to introduce Ron Glenn, our Vice President from Texas. He is also the General Manager of the Red River Authority of Texas.

Mr. GLENN. Mr. Chairman, thank you for the opportunity to speak before you. I am Ron Glenn. I am General Manager of the Red River Authority of Texas, also the Texas Vice President for the Red River Valley Association. I represent not only the Red River Valley Association and its projects as presented today, but the people that live and work in a 43-county area of Texas.

I would like to share with you briefly four or five items that you have already heard a bit about, but one specifically that is near and dear to my heart, the Red River Basin Chloride Project. It stands now at a $225 million project. You gave us $16 million 2 years ago and due to a minor conflict with U.S. fish and wildlife—it was a real conflict, we had to postpone construction for a while.

The Corps is ready to proceed. In May, the supplement to the final EIS will be out and complete and we are ready to move forward with it. Therefore well be asking you for a real big favor. Since you are leaving, I thought it would be real nice if you could give us a check for $50.1 million. We know how you have supported the program in the past.

We believe that we have negotiated with fish and wildlife and the Texas and Oklahoma resource agencies to the extent that we can resolve it with a comprehensive environmental monitoring program that is being implemented as we speak with some of that money that you gave us. Rather than basing our theories on hypothesis, we will seek good science and we believe that the chloride project will stand this one additional test.

A positive point that you might be interested in, the Corps finally finished a project in our area.

Mr. MYERS. What year?

Mr. GLENN. Last year. The Wichita Laying and Holiday Creek Flood Control Project was finally completed and dedicated and it really works. Now, if we could get rain we would be in good shape.

The McGrath Creek Flood Control Project is still under way. It is a $11.3 million project in the Wichita Falls area and the Corps has adequate funds to continue that so we are just asking for their full Corps capabilities.

The Bowie County Levee Project we support 100 percent and ask that you give the Corps $100,000 to continue their preliminary engineering design. The Cypress Valley Watershed Project we support full Corps capability. The Bank Stabilization and Demonstration Project, we believe in that. We are the local sponsor for the Texas portion if it ever gets past Index, Arkansas.

We would like to see a sediment transport study. We believe it would be beneficial to navigation up through Louisiana. Therefore we ask for $2.5 million and full Corps capability on the Bank Stabilization Demonstration Project already mentioned.

Mr. Chairman and Members and staff, I appreciate the opportunity to speak before you. If you have any questions I will entertain them. Otherwise I will just pick up that check. I don't have a plane to catch, but I would really like to go to the bathroom.

Mr. BRONTOLI. I would like to introduce Mr. Bill Chapman, the Vice President from Oklahoma. He is a rancher and attorney and lives in Ardmore, Oklahoma.

Mr. CHAPMAN. Mr. Chairman and members of the committee, it is a privilege to return again this year to testify before you. My family has been involved in agriculture and owned and operated agricultural properties in Oklahoma, central Oklahoma as well as northeast Texas for about going on 80 years now, and we have had three generations so far doing it and are looking forward to the fourth.

I would simply state that we have had some opportunity to see the benefits and the fine work that the Federal Government has done in the projects on Red River, and we firmly believe that the benefits that are now accruing for what you have spent have brought many, many returns and will continue to do so for a long time.

Rather than to go into any great detail and in the interest of time, I would say that the project that my Arkansas colleague spoke to concerning the feasibility of the study on navigation from Shreveport, Bossier to Index, Arkansas, we support that wholeheartedly. From Oklahoma, we very strongly support the Chloride Project that my colleague just spoke to you about.

The one project that hasn't been talked about here that I would like to briefly talk to concerns an authorized, a project already authorized and already exists. It is the Red River Waterway Project. So the issue that I would have to speak to, then, is the benefit-cost ratio on that. We believe that if we had within that project a sediment transport study that would identify the benefits that would accrue due to reducing the dredging costs in navigation below us, that it would be beneficial for all of us if a sediment study would show—point this out.

There is apparently a new technique that has been demonstrated on the Missouri River, and we think that this project, if tried on the Red River, would point out great cost savings to the Federal Government on stabilization. I am speaking here to the erosion of the river bank situation. This is a—it is called an underwater bendway weir, and apparently it has proven much less expensive than conventional methods, and is also very efficient in controlling the energy of the river as it goes downstream.

In line with that, we would ask that the committee direct the Assistant Secretary of the Army Civil Works under the authorized project of the Red River Waterway Project to conduct a sediment transport study on the stretch of the Red River from Denison Dam to Index, Arkansas, for the effect of bank caving to the navigation project in Louisiana.

In addition, the Assistant Secretary of the Army Civil Works be directed to design and construct a demonstration project at two locations using the bendway weir technique and we would request $500,000 in funds to be expended for this purpose in fiscal year 1997.

I would say that it has been a pleasure to come back and see familiar faces that have helped us. I was here originally when Wes Watkins was on your board. It has been a pleasure to see your faces and to have such kind hearings from you.

Mr. MYERS. We understand Wes has changed hats and is heading back.

Mr. CHAPMAN. He has, and he is progressing on his effort to recover his seat, I think.

[The statements of the Red River Valley Association follow:]

RED RIVER VALLEY ASSOCIATION

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P O BOX 709
SHREVEPORT, LA 71162-0709
(318) 221 5233

TESTIMONY

of the

RED RIVER VALLEY ASSOCIATION

to the

SUBCOMMITTEE ON ENERGY

& WATER DEVELOPMENTS

COMMITTEE ON APPROPRIATIONS

U.S. HOUSE OF REPRESENTATIVES

FY 1997 BUDGET

FEBRUARY 27, 1996

A FOUR STATE ASSOCIATION DEDICATED TO THE DEVELOPMENT OF THE LAND AND WATER RESOURCES OF THE RED RIVER BASIN

RED RIVER VALLEY ASSOCIATION

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I. SUMMARY OF FY97 REQUESTS

RED RIVER VALLEY ASSOCIATION

NOTE: Projects are ***NOT*** in any order of priority.

PROJECT **APPROPRIATIONS**

1. Red River Waterway Project

   A. Continue funding to construct federal recreation sites at Locks and Dams 3, 4 and 5 to be cost shared with the established local sponsor. These include boat launches, comfort stations, parking facilities and security lighting.

   B. Initiate construction on the Eagle Bend Capout in Pool 5 which will bring these dikes above pool stage which will be much safer for recreation boaters. Eagle Bend is within two miles of two major federal boat launch facilities. In addition three revetments must also be reinforced in Pool 1; Hadden/Ft. Derussy Revetment, Ben Routh Revetment and Saline Revetment.

   Funds requested for FY97 $17,100,000

2. In FY96 $1 million was appropriated for dredging to insure our many oxbows remain open to the Red River. This will ensure a high valued environmental ecosystem exists and siltation will not create lakes. Until this environmental initiative can be incorporated into a Water Resource Development Act (WRDA) bill we request funding be continued.

   Funds requested for FY97 $ 1,000,000

3. Direct the Secretary of the Army to design and fully fund construction for the dual site, visitor center for the Red River Waterway Project. It is to be fully federal funded and these funds will be used for this project until expended.

   Funds requested for FY97
   a. Natchitoches - 4,500 sq ft. $ 1,600,000
   b. Shreveport/Bossier - 9,000 sq. ft. $ 3,000,000

4. Direct the Secretary of the Army, under the authorized Red River Chloride Project, to initiate construction of Crowell Brine Reservoir, Area VII and Area IX. These funds will be used for this project until expended.

   Funds requested for FY97 $ 50,100,000

5. Congress will direct the Secretary of the Army to initiate a feasibility study to evaluate extending navigation from Shreveport, LA to Index, AR and to be cost shared with the established local sponsor.

   Funds requested for FY97 $ 4,000,000

6. Red River Emergency Bank Protection (Louisiana, Oklahoma, Arkansas and Texas) to fully fund construction for Cat Island Revetment, Dickson Revetment and Finn Phase II Revetment. Provide funding to complete design and fully fund construction of Hurricane Revetment and Blank Lake Revetment and for funds to initiate engineering and design of Hunter's Island and Pleasant Valley revetments.

   Funds requested for FY97 $ 20,000,000

7. Red River Levees and Bank Stabilization Below Denison Dam (Texas, Arkansas and Louisiana) to continue the levee rehabilitation & restoration.

   Funds requested for FY97 $ 3,800,000

8. The McKinney Bayou reconnaissance study of drainage in Miller County, Arkansas was initiated in January 1996. Insure enough funding exists to complete this study in FY97.

   Funds requested for FY97 Full Corps Capability

9. Little River County, Arkansas - The Secretary of the Army acting through the Chief of Engineers is directed to design and initiate construction of the Ogden and Walnut Bayou Levees along the Red River. These levees were authorized by the Flood Control Act of 1946. Funding of $1,000,000 is to be appropriated until expended. The Ogden Levee is to be designed to the same height as the opposite bank levees in Bowie and Miller County.

   Funds requested for FY97 $ 1,000,000

10. The Aloha-Rigolette Flood Control Project, Louisiana, was in the administration's budget for FY96 and we do not anticipate any interference with continued funding for ongoing construction.

    Funds requested for FY97 Full Corps Capability

11. McGrath Creek Flood Control Project, a tributary of Holliday Creek, located in Wichita County, Texas with a total project cost of $11.3 million. This is a project supported by the Administration and we do not anticipate any interruption of funds.

    Funds requested for FY97 Full Corps Capability

12. The Bowie County Levee Project, located along the Red River on the Texas side near Texarkana, Texas. The PED process has been initiated and expected to be completed in FY97. Our request of funds is to complete the PED.

Funds requested for FY97 $ 100,000

13. Cypress Valley Watershed Project, a series of studies in the Big Cypress Valley region (TX) and Caddo Lake (TX & LA).

Funds requested for FY97 Full Corps Capability

14. Direct the Secretary of the Army, under the authority of 'Red River Waterway, Index, AR to Denison Dam, TX, Bank Stabilization', to conduct a 'Sediment Transport Study' on the stretch of the Red River from Denison Dam to Index, Arkansas to determine the effect of bank caving on the navigation project in Louisiana. In addition, the ASA(CW) is directed to design and construct demonstration projects at two locations on the Red River above Index, AR, using the bendway weir technique. Funds are to be utilized until expended.

Funds requested for FY97 $ 2,500,000

15. Direct the Secretary of the Army to expend funds to re-enforce the '12 mile Bayou Revetment' in Pool 5 of the Red River Waterway until funds are expended.

Funds requested for FY97 $ 600,000

16. Bossier Levee District, Louisiana:

A. Direct the Secretary of the Army to clear and grub the channel of Loggy Bayou from its confluence on the Red River for 7.8 miles. This channel has a detrimental affect on flooding in the vast drainage basin of this bayou.

Funds requested for FY97 $ 500,000

B. The existing Red Chute Guideline levee is a part of the Federal levee system, but does not meet 100 year protection as the adjacent levees. This was the only levee to over top in the 1991 flood. Direct that this section of levee be rehabilitated to meet a 100 year protection.

Funds requested for FY97 $ 3,000,000

17. We support the MRT project affecting the Red River - "Bayou Rapides Drainage Structure". Funds in the amount of $400,000 could be used for design of this project.

II. ATTENDEES

RED RIVER VALLEY ASSOCIATION

FEBRUARY 27, 1996

RED RIVER VALLEY ASSOCIATION

Lynn Lowe, President of the RRVA, Texarkana, AR
Phil Alford, Vice-President: Arkansas, Lewisville, AR
Ron Glenn, Vice-President: Texas, Wichita Falls, TX
Jerry Boughton, Vice-President: Louisiana, Shreveport, LA
William C. Chapman, Vice-President: Oklahoma, Ardmore, OK
Rich Brontoli, Executive Director, Bossier City, LA
Norman Budd, Director, Alexandria, LA
Jimmy Banks, Director, Wichita Falls, TX
Edward Hawkins, Director, Foreman, AR
Ben Littlepage, Director, Natchitoches, LA
James Nipper. Director, Stamps, AR
David Potter, Director, Texarkana, TX
Louise Trainer, Executive Secretary, Bossier City, LA

ARKANSAS

Arkansas Red River Commission

Phil Alford, Chairman, Lewisville, AR
Ed Hawkins, Foreman, AR
James Nipper, Stamps, AR
David Potter, Texarkana, AR
Nelson Shaw, Legal Advisor, Texarkana, AR

LOUISIANA

Bossier Levee District

Paul Johnson, Second Vice President, Bossier City, LA
Ken Corley, Commissioner, Bossier City, LA

Caddo-Bossier Port Commission

Wayne T. Davis, Plain Dealing, LA

Caddo Levee District

Harold White, Shreveport, LA
Sam Windham, Shreveport, LA

LA Department of Transportation and Development

Curtis Patterson, Baton Rouge, LA

ATTENDEES (Continuation)

Red River Development Council

Dr. Leland Scoggins, Natchitoches, LA

Red River Waterway Commission

Ben Littlepage, Executive Director, Colfax, LA
Ken Guidry, Asst Executive Director, Natchitoches, LA
Norman Budd, Alexandria, LA
John Bundy, Benton, LA
Marc Dupuy, Jr., Marksville, LA
Richard Gibson, Coushatta, LA
Odell Hodnett, Colfax, LA
Pat Johnson, Natchitoches, LA
Larry Taylor, Bossier City, LA
Randy Walters, Natchitoches, LA

OKLAHOMA

William C. Chapman, Ardmore, OK

TEXAS

Red River Authority of Texas

Ronald Glenn, Wichita Falls, TX

Wichita County Water District #2

Jimmy Banks, Wichita Falls, TX

Cypress Valley Navigation District

Mrs. Dorothy Grant

INTERESTED PARTIES

Mrs. Dorothy Alford, Lewisville, AR
Mrs. Shirley Banks, Wichita Falls, TX
Mrs. Deanna Bundy, Benton, LA
Mrs. Elizabeth Chapman, Ardmore, OK
Mrs. Beverly Crownover, Wichita Falls, TX
Miss Ashley Crownover, Wichita Falls, TX
Mrs. Jo Anne Davis, Plain Dealing, LA
Miss Megan Davis, Plain Dealing, LA
Mrs. George Alice Dupuy, Marksville, LA
Mrs. Sue Glenn, Wichita Falls, TX
Mrs. Charlene Hawkins, Foreman, AR
Mrs. Kathryn Littlepage, Colfax, LA

III. LIST OF WITNESSES

Introduction of the group and opening remarks:

Mr. A. Lynn Lowe President Red River Valley Association	Farmer/Rancher Texarkana, Arkansas

Introduction of witnesses:

Mr. Richard Brontoli
Executive Director
Red River Valley Association

The following witnesses will present testimony on behalf of the Red River Valley Association before the hearings of your Subcommittee today:

Mr. Phil Alford Vice-President - Arkansas Red River Valley Association	Rancher Lewisville, Arkansas
Mr. Jerry Boughton Vice-President - Louisiana Red River Valley Association	Banker Shreveport, Louisiana
Mr. Pat Johnson Commissioner-at-Large Red River Waterway Commission	Construction Natchitoches, Louisiana
Mr. Ron Glenn Vice-President - Texas Red River Valley Association	General Manager Red River Authority of Texas Wichita Falls, Texas
Mr. William C. Chapman Vice-President - Oklahoma Red River Valley Association	Rancher/Attorney Ardmore, Oklahoma

IV. RRVA STATEMENT

STATEMENTS OF

THE RED RIVER VALLEY ASSOCIATION

PRESENTED BY
MR. LYNN LOWE, PRESIDENT

TO THE

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
COMMITTEE ON APPROPRIATIONS

U.S. HOUSE OF REPRESENTATIVES

FEBRUARY 27, 1996

Mr. Chairman and members of the Committee. I am Lynn Lowe, and I am pleased to represent the Red River Valley Association as its President. Our organization was founded in 1925 with the express purpose of uniting the citizens of Arkansas, Louisiana, Oklahoma and Texas to develop the land and water resources of the Red River Basin.

You will shortly hear presentations from individuals who will address the specific needs of their particular states. However, before they begin, I would like to briefly comment on a few of the concerns we have for the future economic well-being of the citizens residing in the four state Red River Basin area.

First, Navigation. Thanks to this committee's support, the Red River Navigation project to Shreveport-Bossier City, Louisiana, -- the largest metropolitan area in the River Basin -- is complete. We have already realized benefits this project will bring to the area -- and the nation -- and thank you for your support. We now ask for your continued support to study the feasibility of extending navigation from Shreveport-Bossier City, Louisiana into the State of Arkansas. Many areas continue to suffer major unemployment, and the navigation project, although not the total solution, will help revitalize our economy. We are aware that limited analysis, to date, have not had the results we had hoped for. If local economy benefits are considered we feel confident a project would be justified. You will hear from our Arkansas delegation the specifics on why a feasibility study must be funded, but I want to stress that the local sponsor, the Red River Commission of Arkansas, has available their 50% cost share for the complete study. Very few local sponsors have funds 'in the bank' and are also willing to fund additional studies to insure a complete analysis is made.

Second, Bank Stabilization. One of the most important continuing programs on the Red River is bank stabilization to stop the loss of valuable farmland that washes down streams to form sandbars and interfere with the navigable channel. These revetment projects are compatible with subsequent navigation and we urge that they be continued in those locations designated by the Corps of Engineers to be the areas of the worst bank caving.

Third, Flood Control. You will recall that in 1990 major areas of northeast Texas, Southwest Arkansas and the entire length of the Red River in Louisiana were ravaged by the worst flooding to hit the region since 1945 and 1957. More than 700,000 acres were flooded with total damages estimated at $20.4 million. However, it could have been much worse. The Corps of Engineers estimates that without the flood control measure authorized by Congress over the past several decades an additional 1.3 million acres would have been flooded with an estimated $330 million in additional flood damage to agricultural and urban developments. We continue to consider flood control a major objective and request you continue funding the levee rehabilitation projects ongoing in Arkansas and Texas.

And, Fourth, Clean Water. Nearly 3,500 tons of natural salts, primarily sodium chloride, enter the upper reaches of the Red River each day, rendering downstream waters unusable for most purposes. Several years ago, Congress authorized funding for the Truscott Brine Lake project, which is located on the South Fork of the Wichita River in King and Knox Counties, Texas. After the project became operational in 1987, an independent panel of experts found that the project not only continues to perform beyond design expectations insofar as providing cleaner water, but has an exceptionally favorable cost benefit ratio, in fact, one of the best cost-benefit ratios of any federally funded project in the nation. The Association urges Congress to continue supporting the Chloride Control Project in order to assure a clean water supply for residential, commercial, industrial, and agricultural uses. This truly affects multi-states requiring a Federal project; as the benefits affect all four states in the Red River Region.

We are sincerely grateful to you for the past support you have given our various projects. We hope that we can count on you again to fund our needs and complete the projects that will help us diversity our economy and create the jobs so badly needed by our citizens.

Civil Work Projects are the one most effective jobs program in the Federal government and more. On an average, 80% of the cost of these projects goes to the private sector for design contracts and all construction. Once completed our communities are provided with the infrastructure to promote economic development opportunities. What other federal program compares to the benefits received for the dollar spent?

Due to emergency funding of natural disasters and other unprogrammed commitments, FY96 appropriations for many projects have been reduced. We strongly encourage that this subcommittee introduce and that the Congress pass a Supplemental Appropriations to restore project funding to the FY96 level. This is important so that our private sector contractors can continue with projects and be paid for work completed. Forcing projects to cease construction will only increase overall project costs.

I am now please to present Richard Brontoli, the Executive Director of the Red River Valley Association who will introduce the witnesses for each of the four states.

Thank you,

V. **ARKANSAS**

STATEMENTS OF

THE RED RIVER VALLEY ASSOCIATION

PRESENTED BY
Mr. PHIL ALFORD, VICE-PRESIDENT, ARKANSAS

TO THE

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
COMMITTEE ON APPROPRIATIONS

U.S. HOUSE OF REPRESENTATIVES

FEBRUARY 27, 1996

As Chairman for the Red River Commission of Arkansas, I wish to thank the members of this Committee for the opportunity to again express the concerns, needs and priorities of funding vitally needed from the Congress to continue the orderly development of the Red River Valley in Southwest Arkansas.

1. Twenty-one years ago the Arkansas General Assembly created the Red River Commission upon the recommendation of Governor Dale Bumpers, now the Senior United States Senator for the State of Arkansas. The Commission was vested with the authority to furnish the local cooperation necessary for the construction and study of projects and to coordinate with the Corps of Engineer and the Congress to develop the water resources of the Red River in Arkansas. With navigation now a reality to Shreveport, Louisiana, we are prepared to extend water transportation into Arkansas. Southwest Arkansas and East Texas are economic depressed regions. This project would provide multi-purpose opportunities for industries and increased employment. A regional impact study would clearly demonstrate the great benefits not realized to date. The Corps of Engineer Reconnaissance Study, completed in November 1995, indicated a B/C Ratio less than 1.0; however, I want to make you aware of four major issues. First, large stone and timber industries did not provide tonnage due to a fear of competition a waterway would bring in lower transportation costs. Second, the US Fish and Wildlife Service Planning Aid Report indicated minimal impact and most probably an enhancement to environmental value. Third, the local sponsor, Red River Commission of Arkansas, has their cost share for the study, on hand! Fourth, a project would provide economic benefits to this economically depressed area in the form of increased employment of our citizens, a local and national benefit not captured in the limited economic analysis made by the Corps in the reconnaissance study. There is no doubt tha this project is feasible and only a full feasibility study will prove that. Most importantly, I stress that the local cost share, 50%, is available now for this study.

* Congress should direct the Secretary of the Army, to initiate a feasibility study to evaluate extending navigation from Shreveport, LA to Index, AR and to be cost shared with the established local sponsor.

Funds requested for FY97	$ 4,000,000

2. Twenty-seven years ago, the bank caving in Southwest Arkansas accelerated to such an extent that the levee boards in that area banned together to form an association to present testimony to the Congress with a united voice. At that time, some of the upstream dams in Arkansas and Oklahoma had been completed which substantially alleviated the threat of floods, but which rapidly accelerated the bank caving due to the river remaining at one-half to two-thirds bank full for long periods of time. Since that time, upstream dams known as Millwood, Gillham, Dierks and DeQueen have been completed which have further reduced the threat of flooding, but which have accelerated the bank caving even more. It is imperative this on-going authorized project continues to be funded.

* Red River Emergency Bank Protection (Louisiana, Oklahoma, Arkansas and Texas) to fully fund construction for Cat Island Revetment, Dickson Revetment and Finn Phase II Revetment. Provide funding to complete design and fully fund construction of Hurricane Revetment and Black Lake Revetment and for funds to initiate engineering and design of Hunter's Island and Pleasant Valley revetments.

Funds requested for FY97. $20,000,000

3. Following the disastrous flood of May, 1990, there can be no doubt of the importance of properly maintained levees and of bank stabilization. All areas not protected by properly maintained levees were flooded and the only protection from enormous bank caving was where revetment projects had been constructed by the Corps of Engineers. We are therefore asking for funds to continue the levee rehabilitation project currently underway in Arkansas to correct the deficiencies and make the levies easier to properly maintain.

* Red River Levees and Bank Stabilization Below Denison Dam (Texas, Arkansas and Louisiana) to continue the levee rehabilitation & restoration.

Funds requested for FY97 $ 3,800,000

4. The McKinney Bayou reconnaissance study of drainage in Miller County, Arkansas was initiated in January 1996. Insure enough funding exists to complete this study in FY97.

Funds requested for FY97 Full Corps Capability

5. Little River County, Arkansas - The Secretary of the Army acting through the Chief of Engineers is directed to design and initiate construction of the Ogden and Walnut Bayou Levees along the Red River. These levees were authorized by the Flood Control Act of 1946. The Ogden Levee is to be designed to the same height as the opposite bank levees in Bowie and Miller County. These funds are to be appropriated until expended.

Funds requested for FY96 $ 1,000,000

6. The Red River Chloride Project is extremely important to the citizens of the Red River Valley in Texas, Oklahoma, Arkansas and Louisiana. Its completion will provide water quality benefits to municipalities, agriculture and industry. The Arkansas delegation fully supports the completion of the project and the testimony as provided by our Texas delegation.

Thank you, Mr. Chairman for the opportunity to address this subcommittee and I am always available to provide you and your staff additional information or clarification on any issue presented.

VI. LOUISIANA

STATEMENTS OF

LOUISIANA DELEGATION

THE RED RIVER VALLEY ASSOCIATION

PRESENTED BY
JERRY BOUGHTON, VICE PRESIDENT

TO THE

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
COMMITTEE ON APPROPRIATIONS

U.S. HOUSE OF REPRESENTATIVES

FEBRUARY 27, 1996

Mr. Chairman and Committee Members, my name is Jerry Boughton, Vice-President, Louisiana, Red River Valley Association. Not only do I represent the citizens of Louisiana and support projects in Louisiana, but support the requests of my colleagues from Arkansas, Texas and Oklahoma. The projects in their states will provide benefits for the Red River citizens of Louisiana.

We request your support to fund the following projects:

1. We appreciate the support of your subcommittee to support the completion of navigation to Shreveport/Bossier City which is now providing an increase to our industrial base, creating jobs and providing economic growth. It is imperative you continue to provide operational and maintenance funds, funding to complete navigation structures and funding to fully develop recreation sites for us to fully realize the total benefits of this project. The following projects are all included in the authorized 'Red River Waterway Project' supported by the administration in FY96. We request the full corps capability to include these specific items.

   a. Continue funding to construct federal recreation sites at Locks and Dams 3, 4 and 5 to be cost shared with the established local sponsor. These include boat launches, comfort stations, parking facilities and security lighting.

   b. Initiate construction on the Eagle Bend Capout in pool 5 which will bring these dikes above pool stage which will be much safer for recreation boaters. Eagle Bend is within two miles of two major federal boat launch facilities. In addition three revetments must also be reinforced in Pool 1; Hadden/Ft. Derussy Revetment, Ben Routh Revetment and Saline Revetment.

Total Funds requested for FY97 (a and b above)	$ 17,100,000

2. Congress directed the Secretary of the Army to design and construct a Regional Visitor Center for the Red River Waterway Project in FY96. We request you further direct the design and construction of dual sited visitor centers in the vicinity of Shreveport/Bossier and Natchitoches, Louisiana.

* Direct the Secretary of the Army to design and fully fund construction for the dual site, visitor center. It is to be fully federal funded and these funds will be used for this project until expended.

Funds requested for FY97

a. Natchitoches - 4,500 sq. ft.	$ 1,600,000
b. Shreveport/Bossier - 9,000 sq ft.	$ 3,000,000

3. You appropriated $1 million in FY96 for dredging to insure our many oxbows remain open to the Red River. This will ensure a high valued environmental ecosystem exists and siltation will not create lakes. Until this environmental initiative can be incorporated into a Water Resource Development Act (WRDA) bill we request funding be continued.

Funds requested for FY97 $ 1,000,000

4. I fully support the testimony of our Arkansas delegation to continue design and construction of revetments for bank stabilization under the authorized project Red River Emergency bank Protection. Specifically, we request full funding which will include Cat Island Revetment in Louisiana. These projects should have an impact to reduce dredging costs in the navigation channel in Louisiana.

5. The Aloha-Rigolette Flood Control project was in the administration's budget for FY96 and we do not anticipate any interference with continued funding for ongoing construction.

Funds requested for FY97 Full Corps Capability

6. A serious condition has developed at one of our existing revetments on the Red River Waterway, in pool 5, with an adjacent federal levee. We profess that it will be prudent to fix this problem now before the integrity of the levee is jeopardized and a much greater federal expense is incurred.

* Direct the Secretary of the Army to expend funds to reenforce the '12 mile Bayou Revetment' in pool 5 of the Red River Waterway until these funds are expended.

Funds requested for FY97 $ 600,000

7. Bossier Parish Levee

A. Loggy Bayou, Louisiana: Loggy Bayou is the final and only channel that drains a vast area of Northwest Louisiana and part of Arkansas water into the Red River. The headwaters start in Columbia County, Arkansas and the drainage area includes large parts of Webster, Beinville and Bossier Parishes in Louisiana. There are no other diversions for these waters to the Red River except through Loggy Bayou.

In 1943 the Bossier Levee District agreed to maintain the last 7.8 miles of Loggy Bayou before it enters the Red River. Conditions have changed drastically since 1943, to include: the diversion of Coushatta Bayou into the Loggy Bayou; the channel is now approximately 20 feet deeper and the Red River Waterway project has pooled the water in this section of Loggy Bayou. The Bossier Levee District does not have the equipment, expertise or funding to keep the channel maintained so there is now a real threat for increased flooding upstream. Since there have been drastic changes to Loggy Bayou beyond the control of the Bossier Levee Board and the waters drained are multi-state it is requested that the Corps of Engineers be directed to maintain the channel in Loggy Bayou under the 'Red River Waterway Project'. Request the Corps perform clearing and grubbing to initially clear out the channel in FY97.

Funds requested for FY97 $ 500,000

B. Red Chute Guideline Levee, Bossier Parish, Louisiana: This section of levee is in the Federal Levee System; however, it is questionable if it meets a minimum 25 year protection. An independent analysis using Corps of Engineers data has indicated it does not meet that standard. In the 1991 flood this was the only levee breached due to overtopping. There has been a dramatic increase in housing subdivisions, in the protected area of this levee. it is requested that the Corps of Engineers be directed to increase the level of this levee to 100 year protect as currently are the adjacent levees. Funds are to be used for this project until expended.

Funds requested for FY97 $ 3,000,000

8. We support the MRT project affecting the Red River - "Bayou Rapides Drainage Structure". Funds in the amount of $400,000 could be used for design of this project.

9. The Chloride Control Project, which is located in the far west reaches of Texas and Oklahoma, will directly impact northwest Louisiana. Completion of this project will provide dependable clean water for municipal, industrial and agricultural use without the need of expensive treatment. The irrigation value alone will greatly increase agricultural production which in turn will increase use of our water transportation system. We fully support the testimony provided by our Texas delegation.

I would now like to introduce Mr. Larry Taylor who will provide detailed testimony for water resource projects sponsored by the Red River Waterway Commission.

ORAL STATEMENT
PRESENTED TO
APPROPRIATIONS SUBCOMMITTEES
ON
ENERGY AND WATER DEVELOPMENT

HOUSE SUBCOMMITTEE - FEBRUARY 27, 1996

ON BEHALF OF
THE STATE OF LOUISIANA
AND
THE RED RIVER WATERWAY COMMISSION OF LOUISIANA

BY:
MR. LARRY TAYLOR
COMMISSIONER, AT-LARGE

VI. LOUISIANA

Taylor

On behalf of the State of Louisiana and the Red River Waterway District, it is my honor and privilege to address this subcommittee on the Red River Navigation Project. Navigation from the Mississippi River to Shreveport/Bossier City, Louisiana became a reality just over one year ago. We request that funding be made available for the Corps of Engineers to complete the ongoing construction projects, such as capping out the revetments for safe navigation for both commercial and recreational users, and expedite the development of recreation and mitigation projects as well as continued operation and maintenance funding for the project. With this preface, we respectfully request that you appropriate $17,000,000 for FY-97 to continue our cooperative mission of developing the Red River Valley and the Nation's infrastructure. Specific Red River Navigation projects include:

1. Recreation at Locks and Dams Nos. 3, 4 and 5 to be cost shared by the Red River Waterway Commission and operated by the Corps.

2. Eagle Bend Capout, Hadden/Ft. DeRussy, Ben Routh and Saline Revetment reinforcements in Pools 1 and 5

3. Continued Recreational Development in Pools 3, 4 and 5 as per the Corps Reevaluation Study.

4. Continued funding of $1,000,000 for maintenance dredging in the oxbows for recreation①

Bank stabilization, navigation feasibility studies and flood control projects throughout the Red River Valley are critical to our areas. We urge you to support these efforts. These valley projects are imperative to the citizens of Louisiana, Arkansas, Oklahoma and Texas. Louisiana projects that are vitally important and funding is desperately needed to construct Cat Island Revetment, Twelve Mile Bayou Revetment, the Aloha-Rigolette Project, and the Bayou Rapides Flood Control Project.

We are here again today to strongly advocate support for the Red River Chloride Control Project which is fundamental to developing usable river water for commercial, industrial and agricultural purposes. We must press forward and forge a cooperative, workable solution to this situation. The benefits to the four state area can only be fully realized through progress in chloride abatement. ②

Funding of the full Corps of Engineers capability is the key to these projects remaining on track and providing the benefits to the valley as well as the nation.

Our main goal is to provide support for the Congress and the Administration while we develop the Red River Valley to its full potential through a cooperative effort. Specific goals are supporting our neighboring states in their project needs and continuing our strong development efforts on Red River through our river ports, recreation, bank stabilization and mitigation efforts. The Red River Waterway Commission has a tremendous amount of work to accomplish in the years to come so that the overall goals of this project come to fruition.

The privilege of addressing this subcommittee is greatly appreciated.

VII. TEXAS

STATEMENT OF

THE RED RIVER VALLEY ASSOCIATION

PRESENTED BY
MR. RONALD J. GLENN, VICE PRESIDENT

TO THE

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
COMMITTEE ON APPROPRIATIONS

U.S. HOUSE OF REPRESENTATIVES

FEBRUARY 27, 1996

Mr. Chairman and Committee Members, my name is Ronald J. Glenn, Vice President, Texas, of the Red River Valley Association, and General Manager of the Red River Authority of Texas. I represent not only the Red River Valley Association and its four state area, but more specifically, the people who live and work in a 43 county area of the Red River Basin in Texas. Accordingly, we support not only the projects I speak of today, but all of the Red River Valley requests presented.

1. The Red River Basin Chloride Control Project is located in west central Texas and southern Oklahoma with a total project cost of $225 million. Sixteen million was appropriated in FY95, by the Administration, to accelerate engineering design, real estate acquisition and initiate construction of the Crowell Brine Dam, Area VII and Area IX. Due to a conflict over environmental issues raised by the U.S. Fish and Wildlife Service, completion of the SFEIS was delayed pending further study to determine the extent of possible impacts to fish and wildlife, their habitats and biological communities along the Red River and Lake Texoma. In an effort to resolve these issues and insure that no harmful impact to the environmental or its ecosystems will result from implementing the Chloride Control Project, a comprehensive environmental and ecological monitoring program is being implemented to evaluate the actual impacts of reducing chloride concentrations within the Red River watershed.

The Corps is scheduled to complete the SFEIS in May 1996. At this time the Corps will be prepared to proceed with the previous directives of the Secretary of the Army to initiate construction of the Crowell Brine Reservoir and Areas VII and IX. Therefore, we respectfully request that the Committee direct the Secretary of the Army to initiate construction of the Crowell Brine Reservoir, Area VII and Area IX. These funds will be used for this project until expended.

Funds requested for FY97	$ 50,100,000

2. The McGrath Creek Flood Control Project, a tributary of Holliday Creek, located in Wichita County, Texas with a total project cost of $11.3 million. This is a project supported by the Administration and we do not anticipate any interruption of funds.

Funds requested for FY97 Full Corps Capability

3. The Bowie County Levee Project, located along the Red River on the Texas side near Texarkana, Texas. The Preliminary Engineering Design (PED) process has been initiated and expected to be completed in FY97. Our request of funds is to complete the PED.

Funds requested for FY97 $ 100,000

4. Cypress Valley Watershed Project, a series of studies in the Big Cypress Valley region (TX) and Caddo Lake (TX & LA).

Funds requested for FY97 Full Corps Capability

5. A Bank Stabilization Demonstration Project located between Denison Dam and Index, Arkansas. There is a serious problem with the annual loss of prime farmland between the Denison Dam and Index, Arkansas. We fully support the testimony of the Oklahoma delegation to initiate a 'Sediment Transport Study' and a demonstration project using the new technique of Bendway Weirs. We believe a bank stabilization project in this stretch will greatly reduce dredging costs for the Navigation Project in Louisiana.

We appreciate this committee's support and time to consider the requests from the citizens of Texas within the Red River Valley Region.

Thank you.

Ronald J. Glenn

VIII. OKLAHOMA

STATEMENTS OF

OKLAHOMA DELEGATION

THE RED RIVER VALLEY ASSOCIATION

PRESENTED BY
WILLIAM C. CHAPMAN, VICE PRESIDENT

TO THE

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
COMMITTEE ON APPROPRIATIONS

U.S. HOUSE OF REPRESENTATIVES

FEBRUARY 27, 1996

Mr. Chairman and Committee Members, I am William C. Chapman, and I live near Madill, Oklahoma, on a farm/ranch in Marshall and Johnston Counties. My father came to Oklahoma in 1915 at age 27 and lived the rest of his 94 years in this area as a farmer and rancher. His parents purchased agricultural property in Red River County Texas, in 1926, and it has remained in my family since then and is now owned by me. My family has been very interested in the progress of the Red River Valley for three generations. I presently serve as Vice-President of the Oklahoma delegation of the Red River Valley Association and am speaking today on behalf of the entire Oklahoma delegation. We believe that any federal monies spent on civil work projects are really investments in the future of our children and will return several times the original investment in benefits that will eventually accrue back to the federal government.

1. It is essential to protect the banks from cavings and erosion along the Red River below Denison Dam to Index, Arkansas. The Federal Government constantly encourages its farmers to protect our lands against all forms of erosion, so it only makes sense to be consistent. An authorized project exists; 'Red River Waterway, Index, AR to Denison Dam, TX Bank Stabilization', so the issue lies with the benefit/cost ratio. We believe that a 'Sediment Transport Study' would identify great benefits due to reduced dredging cost to the Navigation Waterway in Louisiana. There is a new technique for bank stabilization which could be allowed as a demonstration project under this authorized project. This new technique, underwater bendway weirs, have proven to be less expensive than conventional methods and be more efficient in controlling the energy of the River. Much prime farmland in Oklahoma and Texas is lost each year to river erosion and we must investigate all avenues to correct this problem.

* Direct the Secretary of the Army, under the authorized 'Red River Waterway, Index, AR to Denison Dam, TX Bank Stabilization' to conduct a 'Sediment Transport Study' on the stretch of the Red River from Denison Dam to Index, Arkansas to determine the effect of bank caving on the Navigation project in Louisiana. In addition, the Secretary of the Army is directed to design and construct demonstration projects at two locations, on the Red River above Index, AR, using the bendway weir technique. These funds are to be used until expended.

Funds requested for FY 97	$ 2,500,000

2. We firmly believe that it is economically feasible as well as both logical and practical to bring navigation of the Red River to Denison Dam. In pursuit of that goal the completion of Locks and Dams 4 and 5 have insured the success for the development of navigation and commerce to the areas from Shreveport, Louisiana, downstream to the Mississippi River. The next phase is to extend navigation past Shreveport-Bossier City, LA to Index, AR. We fully support the feasibility study as testified for by our Arkansas delegation.

3. We want you to consider a critical project that allows us the ability to fully utilize the surface water of the Red River during almost its entire journey across the four states of Texas, Oklahoma, Arkansas, and Louisiana. At the current time the chloride content of the Red River is such that it is not usable but in a few isolated cases for municipal, industrial and agricultural uses. This is due to the presence of ten major chloride sources located on the banks or within the tributaries of the Red River in Oklahoma and Texas. We fully support the testimony of our Texas delegation for you to move this project to completion. We support the Tulsa District, Corps of Engineers, continuation of design, land acquisition and completion of the SEIS; however, construction must continue in FY97.

We appreciate this committees support and time to consider the requests from the citizens of Oklahoma within the Red River region.

IX. PLATFORMS, RESOLUTIONS AND PROGRAM OF WORK

RED RIVER VALLEY ASSOCIATION

INTRODUCTION

The Red River Valley Association is a voluntary group of citizens banded together to advance the economic development and future well-being of the citizens of the four state Red River Basin area in Arkansas, Louisiana, Oklahoma and Texas.

For the past 71 years, the Association has done notable work in the support and advancement of programs to develop the land and water resources of the Valley to the beneficial use of all the people. To this end, the Red River Valley Association offers its full support and assistance to the various Port Authorities, Chambers of Commerce, Economic Development Districts and other local governmental entities in developing the area along the Red River.

The Resolutions contained herein were adopted by the Association during its 71st Annual Meeting in Shreveport, Louisiana on February 15, 1996, and represent the combined concerns of the citizens of the Red River Basin area as they pertain to the goals of the Association, specifically:

--- Economic and Community Development
--- Flood Control
--- Bank Stabilization
--- A Clean Water Supply for Residential, Commercial, Industrial and Agriculture Uses
--- Solar and Hydroelectric Power Generation
--- Recreation
--- Navigation
--- Environmental Balance

The Red River Valley Association is aware of the constraints on the federal budget, and has kept those restraints in mind as these Resolutions were adopted. Therefore, and because of the far-reaching regional and national benefits addressed by the various projects covered in these Resolutions, we urge the members of Congress to review the materials contained herein and give serious consideration to funding the projects at the levels requested.

A. Lynn Lowe
President

Phil Alford
Vice-President, Arkansas

Jerry Boughton
Vice-President, Louisiana

William C. Chapman
Vice-President, Oklahoma

Ron Glenn
Vice-President, Texas

Richard Brontoli
Executive Director

Walter Lamb
Secretary-Treasurer

X. Support Resolution: Shreveport Chamber of Commerce,
Shreveport, Louisiana

TRANSPORTATION - WATER

Red River Navigation

ISSUE: The Red River Waterway Project has been completed from the Mississippi River to Shreveport/Bossier City, Louisiana. Over the next few years the navigation structures (Dykes & Revetments) need to be adjusted and some may be added. In addition, it will take approximately $11 million per year to operate the system.

WHY IMPORTANT: For economic development to be fully realized we must operate the Red River in a reliable manner for industry to use it as a major transportation system. The navigation channel must be maintained at a 9 foot draft for safe use. If the channel is not properly maintained, industry will be reluctant to use the Red River. The Oxbows created by the project must be kept open to the river and allowed to become lakes. Funding must be appropriated to ensure this environmental initiative is maintained.

In FY 96 congress authorized a Regional Visitor Center for the Red River Waterway Project. The best option will be for dual sites within the visitation corridor. One site at Natchitoches, LA will be 4,500 square feet and a second site at Shreveport/Bossier, LA will be 9,000 square feet. We request your support for this concept.

CHAMBER POSITION: We thank you for the funds which completed the Red River Waterway Project and we request $18,100,000 for continued projects for navigation and recreation.

We support the dual site Visitor Center for the Red River Waterway and request $1,600,000 for the Natchitoches Center and $3,000,000 for the Shreveport/Bossier Center.

X. Support Resolution: Shreveport Chamber of Commerce,
Shreveport, Louisiana

TRANSPORTATION - WATER

Red River Navigation

ISSUE: The Red River Waterway Project has been completed from the Mississippi River to Shreveport/Bossier City, Louisiana. Over the next few years the navigation structures (Dykes & Revetments) need to be adjusted and some may be added. In addition, it will take approximately $11 million per year to operate the system.

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We support the dual site Visitor Center for the Red River Waterway and request $1,600,000 for the Natchitoches Center and $3,000,000 for the Shreveport/Bossier Center.

X. Support Resolution: Shreveport Chamber of Commerce,
Shreveport, Louisiana

TRANSPORTATION - WATER

Red River Basin Chloride Control Project

ISSUE: The first comprehensive study of the water quality of the Red River basin was initiated in 1957 by the U.S. Public Health Service under the authorization of the Federal Water Pollution Control Act. It was determined that ten natural salt source areas contribute a daily average of 3,600 tons of salt per day to the river. This renders downstream waters unusable for most purposes. Structural measures to help control the chloride pollution at 8 of the 10 sites were developed by the Tulsa District, Corps of Engineers. These plans led to Congressional authorization in the Flood Control Acts of 1962, 1966 and 1970. The first structure was completed in January 1964 and the second in Many 1987. The Water Resources Development Act of 1986 authorized the construction of the remaining sites.

Approximately one-third of the project cost has been expended to date. The total project is expected to cost $303 million dollars.

Presently, the Tulsa District, Corps of Engineers, is preparing a Supplement to the Environmental Impact Statement (SEIS). Construction cannot continue until this is completed. SEIS completion is scheduled for May, 1996.

WHY IMPORTANT: Natural mineral pollutants (primarily chlorides and sulfates) in the upper reaches of the Red River Basin are rendering downstream waters unusable for most purposes; therefore, the Red River Chloride Project is imperative in order to realize full utilization of the surface water supplies in Louisiana (as well as Texas, Oklahoma and Arkansas). More than 1,000 miles of streams in the river system are severely contaminated by naturally occurring brine and is not suitable for municipal, industrial or agricultural purposes.

The benefits of the Red River Basin Chloride Control Project will be improvements in water quality that will allow use for municipal, industrial, agricultural and recreational purposes. The added benefit will be the jobs created resulting from the implementation of the Chloride project.

CHAMBER POSITION: We support this project in its present form and request completion of the SEIS by the project date of May, 1996. We support and encourage funding at the levels necessary to complete the remaining costs of the project by the year 2001. Construction must resume in 1996 on Crowell Brine Reservoir, Area VII and Area IX.

XI. Support Resolution: Shreveport/Bossier Port Commission

CADDO/BOSSIER PORT COMMISSION
P.O. BOX 52071 — SHREVEPORT, LOUISIANA 71135-2071
(318) 861-4981 — FAX (318) 869-2329

COMMENTS TO THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT COMMITTEE ON APPROPRIATIONS UNITED STATES HOUSE OF REPRESENTATIVES

On behalf of the citizens of Northwest Louisiana, the Caddo-Bossier Parishes Port Commission strongly urges the Congress of the United States to allocate the necessary monies for the Red River Waterway Project for Fiscal Year 1997 so the Red River can be operated in a reliable manner for industry to use it and in order to ensure the viability of the $1.8 billion investment made over the last twenty years by the taxpayers of this country.

The Port of Shreveport-Bossier is readying for the beginning of regular operations at the Port complex site. It stands today as a longtime dream with a potential proving to exceed even the most optimistic projections. With local taxpayer investment guaranteed by a 1993 property tax, the Port's infrastructure is growing to meet the demands of a rapidly expanding customer base. Public investment in the Port complex today stands at $52,961,426. Projected investment by private business announced at this time, however, is more than EIGHT TIMES that amount, at $455,200,000.

Progress toward our goal of becoming a premier multi-modal transportation system is excellent. Attached for your information is our General Mission Statement, highlights of our 1995 Accomplishments and our 1996 program of work.

Results of these efforts should provide a sense of pride to all members of Congress who believed in the Red River Navigation Project. You recognized the possible benefits, the job-generating capabilities, the advantageous cost benefit ratios. And these are becoming reality at The Port of Shreveport-Bossier.

MEMBERS: Maxine E. Sarpy, President; Jerry C. Harris, Vice President; Edward G. Powell, Secretary-Treasurer; Wayne T. Davis; Robert G. Harris; W. Ben Helm; Sinclair B. Kouns; R. M. Prestridge; J. Blocker Thornton

P.O. Box 52071, Shreveport, LA 71135
THE PORT
SHREVEPORT
BOSSIER
(318) 861-4981 · FAX (318) 869-2329

Mission

- To be a public stimulus for economic development in the region by providing multi-modal transportation service and infrastructure for domestic and international commerce and trade which will foster job creation, coupled with dollar investment, in and for Caddo and Bossier Parishes.

Governance

- The Port of Shreveport-Bossier is governed by the nine member Caddo-Bossier Port Commission. The Commission sets policies and regulates the traffic and commerce of the Port through Caddo and Bossier parishes. A seven member staff manages the Port's daily operations. SSA/Ryan-Walsh is the Port Operator.

Location/Size of the Port

- The Port of Shreveport-Bossier owns (1) 2,000 acres located just south of Shreveport's city limits on the west side of Red River and bordered by Louisiana Highway 1 and a Union Pacific main line rail and (2) a 10-acre site in southwest Shreveport, the Ark-La-Tex Intermodal Center. Fifty acres of the Red River port site are devoted to riverfront activities.

Facilities

- 600 foot general cargo wharf (services two standard river barges simultaneously)
- 300 foot liquids wharf (services two standard river barges simultaneously)
- 24 foot wide primary access road off of LA Highway 1
- South access road off of LA Highway 1
- 22,500 lf on-dock heavy rail with side track
- 30 ton bridge truss and crane
- 50 ton overhead bridge crane
- Coal pile/open storage
- 30,000 square foot transit shed
- 2.5 acre concrete open storage
- Truck/rail certified weign scales
- Two additional liquids wharfs to be added in 1996
- Intermodal Container Handling Freight facility has COFC/TOFC handling capabilities for container freight.

An Intermodal Port

- Committed to intermodalism (i.e. offering multiple modes of transporting cargo) from the beginning, the Port of Shreveport-Bossier gives shippers a complete range of transportation options - rail, truck and barge.

HIGHLIGHTS/1995 ACCOMPLISHMENTS

1. The first barges arrived at the Port of Shreveport-Bossier!

2. New customers announcing future location to the port complex: Bioenergy Development Corporation, Neste Trifinery Petroleum Services, Coastal Towing/Eagle Asphalt, and Red River Terminals, LLC (Atlas Processing Company/Pennzoil Products Company and Hollywood Marine) for a total projected new investment of almost $420 million and creation of 400 new jobs when their construction is completed and their operations begin.

3. Progress on Port complex infrastructure and facilities was phenomenal.
   A. Construction substantially completed:
      (1) general cargo wharf 400 lf extension
      (2) 30 T bridge truss and crane
      (3) 1+ acre coal pile/open storage
      (4) extension to main access road complete on south side
      (5) south access road
   B. Under construction:
      (1) water service: extension of lines, 2.5 million gallon elevated storage tank, and booster station
         *USDA/RECD loan for $11.95 million (40 year loan)
         formerly FmHA; largest loan in Louisiana
      (2) sewer service
         *LA DEQ sewer loan for $6.6 million (20 year loan)
      (3) 15,000 lf on-dock heavy rail with side track and truck\rail certified weigh scales
      (4) 30,000 sf general cargo transit warehouse, 2.5 acre initial hardstand, and 50 T bridge crane
         *94-95 DOTD Port Priority Projects
      (5) rail extension south to petroleum wharf and customers
         *95-96 Capital Outlay
   C. Awarded - second liquid dock (Atlas)
   D. In design - third liquid dock (Specialty), Port office building
         *95-96 DOTD Port Priority Project/dock

4. Signed contract with Ryan-Walsh Company for stevedoring services/operation of the Port, including operation of the Ark-La-Tex Intermodal Center.

5. Signed Cooperative Endeavor Agreement with the City of Shreveport for operation and maintenance of the water and sewer systems.

6. Marketing efforts included hinterland markets for the first time: first annual Port Night in Dallas/Ft. Worth held in partnership with the Port of New Orleans and a reception for transportation facilitators held in New Orleans. Produced first Port video for marketing uses.

7. Received FY 1995-96 Capital Outlay Priority One approval for $1 million for railroad extension and FY 1995-96 Ports Priority Program funding approval of $1,119,600 for additional liquid dock.

8. Foreign Trade Zone #145 expansion application completed, submitted, and in process by the Foreign-Trade Zones Board, includes Port complex site.

BOARD OF COMMISSIONERS
1996 PLAN OF ACTION

1. Construct/acquire the necessary infrastructure, facilities, equipment necessary to move cargo and operate the Port, continuing to follow adopted Infrastructure Plan through the Year 2000, adapting to the needs of customers as they occur.

2. Develop Port operations in concert with Port Operator Ryan-Walsh, filling functional gaps as needed, particularly in relation to:
   (a) Red River Port complex, including river safety/environmental concerns
   (b) intermodal transport facilitating requirements

3. Continue to pursue additional Port land expansion as needs transpire.

4. Expand tonnages for 1996 operations.

5. Maximize available financial resources, continuing to leverage local tax dollars to maximize taxpayer investment

6. Attract (1) users for Port multimodal transportation services and (2) businesses and industries for Red River Port Complex location
   (a) implement increased marketing efforts along the I-20 and I-30 corridors between Shreveport and Dallas-Fort Worth metroplex
      - continue Port Night with the Port of New Orleans in Dallas-Fort Worth
      - newspaper education campaign in targeted area
      - advertise in targeted areas (print media)
      - direct mail to targeted areas
      - contact through chambers/economic foundations within targeted areas, sponsor functions with potential Port users
   (b) continue to work closely with local Port users and area businesses
   (c) update promotional materials
   (d) continue to work with other economic development agencies
   (e) participate in regional/national business promotions of Shreveport-Bossier
   (f) facilitate foreign investment/international industrial recruitment

7. Communicate activities to all citizens of Caddo and Bossier Parishes
   (a) continue minutes mail-out
   (b) continue speaking to interested groups
   (c) print small pamphlet for distribution

8. Continue to work with other economic development agencies furthering regional economic development

9. Continue interaction with city, parish, state, and federal authorities/agencies on legislative issues of importance.

10. Continue participation in industry seminars, programs, events.

TUESDAY, FEBRUARY 27, 1996.

RED RIVER BASIN PROJECTS

WITNESS

HON. JIM McCRERY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF LOUISIANA

Mr. MYERS. We are pleased to have one of our colleagues come in now, Mr. McCrery from Louisiana. This is the Red River Project Group. We would be pleased to hear from you at this time.

Mr. MCCRERY. Thank you, Chairman Myers and Representative Bevill, and members of the committee. I appreciate your allowing me to testify, as I come from the airport and another sleepless night with a new baby in the house. It is a bundle of joy, but I wish he would get his days and nights straight.

Mr. MYERS. Congratulations.

Mr. MCCRERY. Thank you. I am going to rely on the always dependable testimony of the Red River Valley representatives to present in more detail their requests. However, there are three areas that I would like to emphasize for your consideration.

First, the Red River Navigation Project continues to enjoy bipartisan support among not only Federal legislators, but State and local as well. Of particular interest this year is funding to complete the navigation and recreation projects recommended by the administration in fiscal year 1996.

First, among these is the construction of recreation sites at locks and dams 3, 4 and 5. In addition, we request funds for construction of the Eagle Bend Capout in pool 5. This project is needed to bring the dikes above pool stage to ensure the safety of the many people who enjoy boating in the area around the dikes. A total of $17 million is being sought for these two projects, and I hope the committee will consider this.

Eco-tourism is becoming popular, more popular around the United States, and we hope in our area as well. Thanks to this subcommittee's past support the Red River remains a focus of eco-tourism in my district. To leverage past investment and take advantage of this emerging opportunity, the Association seeks funding for construction of two visitor centers, a 9,000-square-foot facility in Shreveport, and a 4,500-square-foot center in Nachitoches. A total of $4.6 million is needed to build these facilities.

Recreational users in the Valley continue to benefit from the oxbows created along the water course. To prevent silt from closing these oxbows into lakes, $1 million is being requested for the dredging operation itself. This money will ensure the oxbows remain open to the Red River, and will preserve a valuable recreational environmental resource.

Second, I want to reiterate my strong support for the Red River Chloride Control Project. This is a matter of critical importance to maintaining water quality sufficient to support agricultural use and safe drinking water.

Parts of the Upper Red River region already are experiencing water shortages directly associated with the depletion of ground water and the inability to draw water from the Red River because of its excessive levels of chlorine. Lack of sufficient clean water also serves as a disincentive to locating in the area for any business requiring abundant clean water in their operations. Even communities far downstream, notably Shreveport and Bossier City, must spend increasing resources on expensive advanced water treatment facilities to make water from the Red River drinkable.

Repeated analysis by the Corps of Engineers has demonstrated that completion of the Chloride Control Project will impose no significant burdens to existing recreational or industrial uses of the river, but in an effort to answer questions raised by the U.S. Fish and Wildlife Service, the Corps undertook an additional environmental impact study and expects to complete its work in May.

At that point, the Corps will be in a position to go ahead with construction of facilities to reduce the concentration of chlorine in the Red River. Some $50 million is being requested in fiscal year 1997 to support construction of the Crowell Brine Reservoir. I strongly support that request.

This subcommittee recognized the need to be a good steward of the environment, to balance economic development of natural resources with the preservation of critical habitat. In my district, the most visible evidence of your policy has been the Subcommittee's continuing support of funding for mitigation of wetlands lost due to construction of the Red River Navigation Project.

No funds were appropriated for mitigation last year, reflecting the Corps of Engineers' continuing delays in implementing your mandate to proceed with mitigation. Because of last year's funding pause, and recognizing that with completion of the Navigation Project the loss of wetlands has already occurred, I am asking the subcommittee to provide $5 million for wetlands mitigation. I am reliably informed by those closest to the mitigation effort in my district that this amount will be sufficient to complete purchase of the 12,000 acres of mitigation lands already identified in the Bayou Bodcau area. The $5 million requested is in keeping with past requests which have met with your approval and support.

Chairman Myers, you and your subcommittee are to be congratulated on the way you conduct your business. You always do it very well and in an efficient manner without regards to political party, and I appreciate your allowing me to appear once again before your subcommittee and deliver testimony.

[The statement of Mr. McCrery follows:]

JIM McCRERY
5th District, Louisiana

COMMITTEE ON WAYS AND MEANS
SUBCOMMITTEE ON HEALTH
SUBCOMMITTEE ON HUMAN RESOURCES

Congress of the United States
House of Representatives
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TESTIMONY OF THE HONORABLE JIM McCRERY[*] BEFORE THE HOUSE APPROPRIATIONS COMMITTEE'S SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

February 27, 1996

CHAIRMAN MYERS, REPRESENTATIVE BEVILL AND MEMBERS OF THE SUBCOMMITTEE, THANK YOU FOR ALLOWING ME TO APPEAR TODAY AND THANK YOU FOR YOUR PAST SUPPORT OF ECONOMIC DEVELOPMENT AND ENVIRONMENTAL PRESERVATION ALONG THE RED RIVER.

I WILL RELY ON THE RED RIVER VALLEY ASSOCIATION'S REPRESENTATIVES TO PRESENT THE DETAILS OF THEIR PROPOSAL. HOWEVER, I WOULD LIKE TO EMPHASIZE THREE AREAS FOR THE YOUR CONSIDERATION.

FIRST, THE RED RIVER NAVIGATION PROJECT CONTINUES TO ENJOY BIPARTISAN SUPPORT AMONG STATE, LOCAL AND FEDERAL POLICY-MAKERS. OF PARTICULAR INTEREST THIS YEAR IS FUNDING TO COMPLETE THE NAVIGATION AND RECREATION PROJECTS RECOMMENDED BY THE ADMINISTRATION IN FY-96. FIRST AMONG THESE IS THE CONSTRUCTION OF RECREATION SITES AT LOCKS AND DAMS 3, 4, AND 5--PROJECTS WHICH WILL BE COST SHARED WITH LOCAL SPONSORS. IN ADDITION, WE REQUEST FUNDS FOR CONSTRUCTION OF THE EAGLE BEND CAPOUT IN POOL 5. THIS PROJECT IS NEEDED TO BRING THE DIKES ABOVE POOL STAGE TO ENSURE THE SAFETY OF THE MANY PEOPLE WHO ENJOY BOATING IN THE AREA AROUND THE DIKES. A TOTAL OF $17.1 MILLION IS BEING SOUGHT FOR THESE TWO PROJECTS AND I FULLY ENDORSE THIS APPROPRIATIONS REQUEST.

AS YOU WELL KNOW, ECO-TOURISM IS A GROWING INDUSTRY NOT ONLY IN LOUISIANA, BUT THROUGHOUT THE NATION. THANKS TO THE SUBCOMMITTEE'S PAST SUPPORT, THE RED RIVER REMAINS A FOCUS OF ECO-TOURISM IN MY DISTRICT. TO LEVERAGE PAST INVESTMENT AND TAKE ADVANTAGE OF THIS EMERGING OPPORTUNITY, THE ASSOCIATION SEEKS FUNDING FOR CONSTRUCTION OF TWO VISITOR'S CENTERS--A 9,000 SQUARE FOOT FACILITY IN SHREVEPORT; AND, A 4,500 SQUARE FOOT CENTER IN

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[*] **EMBARGOED UNTIL DELIVERED.**

NACHITOCHES. A TOTAL OF $4.6 MILLION IS REQUIRED TO BUILD THESE FACILIT

RECREATIONAL USERS IN THE RED RIVER VALLEY CONTINUE TO BENEFIT FROM THE OXBOWS CREATED ALONG THE WATER COURSE. TO PREVENT SILT FROM CLOSING THESE OXBOWS INTO LAKES, $1 MILLION IS BEING REQUESTED FOR DREDGING OPERATIONS. THIS MONEY WILL ENSURE THE OXBOWS REMAIN OPEN TO THE RED RIVER AND PRESERVE A VALUABLE RECREATIONAL AND ENVIRONMENTAL RESOURCE.

SECOND, I WANT TO REITERATE MY STRONG SUPPORT FOR THE RED RIVER CHLORIDE CONTROL PROJECT--A MATTER OF CRITICAL IMPORTANCE TO MAINTAINING WATER QUALITY SUFFICIENT TO SUPPORT AGRICULTURAL USE AND SAFE DRINKING WATER.

PARTS OF THE UPPER RED RIVER REGION ALREADY ARE EXPERIENCING WATER SHORTAGES DIRECTLY ASSOCIATED WITH THE DEPLETION OF GROUND WATER AND THE INABILITY TO DRAW WATER FROM THE RED RIVER BECAUSE OF ITS EXCESSIVE LEVELS OF CHLORINE. THESE AREAS SUFFER A DOUBLE BURDEN AS THE LACK OF SUFFICIENT CLEAN WATER ALSO SERVES AS A DISINCENTIVE TO LOCATING IN THE AREA FOR ANY BUSINESS REQUIRING ABUNDANT CLEAN WATER IN THEIR OPERATIONS. EVEN COMMUNITIES FAR DOWN STREAM--NOTABLY SHREVEPORT AND BOSSIER CITY IN MY DISTRICT--MUST SPEND INCREASINGLY SCARCE TAXPAYER RESOURCES ON EXPENSIVE, ADVANCED WATER TREATMENT FACILITIES TO MAKE WATER FROM THE RED RIVER DRINKABLE.

REPEATED ANALYSIS BY THE CORPS OF ENGINEERS HAS DEMONSTRATED THAT COMPLETION OF THE CHLORIDE CONTROL PROJECT WILL IMPOSE NO SIGNIFICANT BURDENS TO EXISTING RECREATIONAL OR INDUSTRIAL USES OF THE RIVER. BUT IN AN EFFORT TO ANSWER QUESTIONS RAISED BY THE U.S. FISH AND WILDLIFE SERVICE, THE CORPS UNDERTOOK AN ADDITIONAL ENVIRONMENTAL IMPACT STUDY AND EXPECTS TO COMPLETE ITS WORK IN MAY. AT THAT POINT, THE CORPS WILL BE IN POSITION TO BEGIN CONSTRUCTION OF FACILITIES TO REDUCE THE CONCENTRATION OF CHLORINE IN THE RED RIVER.

SOME $50.1 MILLION IS BEING REQUESTED IN FY-97 TO SUPPORT CONSTRUCTION OF THE CROWELL BRINE RESERVOIR--AN INTEGRAL PART OF THE CHLORIDE CONTROL EFFORT--AND I STRONGLY SUPPORT THAT REQUEST.

LASTLY, THIS SUBCOMMITTEE LONG AGO RECOGNIZED THE NEED TO BE A GOOD STEWARD OF THE ENVIRONMENT--TO BALANCE ECONOMIC DEVELOPMENT OF NATURAL RESOURCES WITH THE PRESERVATION OF

CRITICAL HABITAT. THE MOST VISIBLE EVIDENCE OF YOUR POLICY HAS BEEN THE SUBCOMMITTEE'S CONTINUING SUPPORT OF FUNDING FOR MITIGATION OF WETLANDS LOST DUE TO CONSTRUCTION OF THE RED RIVER NAVIGATION PROJECT.

NO FUNDS WERE APPROPRIATED FOR MITIGATION LAST YEAR, REFLECTING THE CORPS OF ENGINEERS CONTINUING DELAYS IN IMPLEMENTING YOUR MANDATE TO PROCEED WITH MITIGATION. BECAUSE OF LAST YEAR'S FUNDING PAUSE AND, RECOGNIZING THAT WITH COMPLETION OF THE NAVIGATION PROJECT THE LOSS OF WETLANDS HAS ALREADY OCCURRED, I AM ASKING THE SUBCOMMITTEE TO PROVIDE $5 MILLION FOR WETLANDS MITIGATION. I AM RELIABLY INFORMED BY THOSE CLOSEST TO THE MITIGATION EFFORT IN MY DISTRICT THAT THIS AMOUNT WILL BE SUFFICIENT TO COMPLETE PURCHASE OF THE 12,000 ACRES OF MITIGATION LANDS ALREADY IDENTIFIED IN THE BAYOU BODCAU AREA. THE $5 MILLION REQUESTED IS IN KEEPING WITH PAST REQUESTS WHICH HAVE MET WITH YOUR APPROVAL AND SUPPORT.

CHAIRMAN MYERS, YOU AND YOUR SUBCOMMITTEE ARE TO BE CONGRATULATED FOR THE WAY IN WHICH YOU HAVE WORKED TO MAKE WATER DEVELOPMENT A BIPARTISAN POLICY. WHILE YOU FACE A NUMBER OF CHALLENGES IN DEVELOPING THIS YEAR'S APPROPRIATIONS BILL, I WANT YOU TO KNOW YOU WILL HAVE MY SUPPORT THROUGHOUT THE COMING SESSION. THANK YOU AGAIN FOR ALLOWING ME TO TESTIFY.

Mr. MYERS. Thank you. Good luck with that new baby.

Mr. BRONTOLI. That concludes the witnesses. I want to recognize Representative Chapman, who is also leaving the subcommittee. That concludes our testimony, sir.

Mr. MYERS. The gentleman will be heard from. He will be working with us when we write the bill. Thank you for your testimony.

TUESDAY, FEBRUARY 27, 1996.

TENNESSEE PROJECTS

WITNESS

HON. ED BRYANT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TENNESSEE

Mr. MYERS. We are pleased now to hear from our colleague from Tennessee, Ed Bryant. Your prepared statement will be placed in the record and you may proceed.

Mr. BRYANT. Thank you, Mr. Chairman. I appreciate your committee taking time to hear me today. It has been an awfully busy day. I do want to thank you and the members of the subcommittee for giving me the opportunity to testify on this important subject and thank the committee for its past assistance to the people of the 7th District of Tennessee that I represent, particularly in helping to protect its river banks from erosion and for supporting its environmental restoration efforts.

Like many of us in this room, I am a strong supporter of a balanced budget and have voted consistently to trim Federal spending wherever feasible, and I realize that you have to give very careful consideration as to how to best allocate our scarce Federal resources in fiscal year 1997. With this in mind, I would like to take just a few minutes to bring to your attention three projects in my district, which I think merit your consideration, because despite what some environmental groups are saying, I do have concerns about our environment.

I would very much appreciate your support for funding for the feasibility phase of the Wolf River Study, a three-part remediation and environmental restoration project within the Wolf River drainage basin ecosystem in the States of Tennessee and Mississippi. The first part of this study, reconnaissance, was authorized by the House Committee on Public Works and Transportation by resolution adopted on September 24, 1992. The study was completed in October 1995 and official findings are currently under review. In anticipation of a favorable recommendation, I respectfully urge that funding in the amount of $130,000 be made available for cost-shared feasibility studies for fish and wildlife habitat restoration and protection in the Wolf River Basin.

As a result of channelization and realignment work by the Corps of Engineers many years ago and the absence of mitigation for the associated environmental losses, the Wolf River Basin is experiencing a degradation of its ecosystem with loss of wetlands, seasonally flooded bottom land hardwoods, national aquatic habitat, riparian habitat, waterfowl habitat, and habitat used by endangered species. Projects for the Corps of Engineers involving channelization and realignment work on the lower 22 miles of the Wolf River 30 years ago significantly reduced seasonal flooding but initiated erosion, headcutting and long-term drying of wetlands.

The damage now extends and is causing losses up the main channel of the Wolf at the rate of approximately one-half mile per year, and it extends into the Wolf River's tributaries. The erosion and headcutting have caused and are continuing to cause rapid losses. There is an immediate need for stabilization of the channel bottom grade to protect a major bridge and utilities which cross the river just upstream of the current headcut area. The long-term effect of these changes is an adverse alteration of the hydraulic regime of wetlands which are an essential source of recharge for the Memphis Sands Aquifer from which Shelby County gets its drinking water and which may be threatened if appropriations for remediation are not made.

The focus of the study thus far has been to verify the viability and cost effectiveness of engineering solutions. The problems addressed would primarily be the degraded wetland, riparian and aquatic habitat, and recreation features which would enhance the utilization of basin resources to meet critical needs for outdoor recreation. The stretch of river in question is immediately downstream from approximately 460 acres recently acquired for designation as a State Natural Area, and the section most in need of immediate protection from continued headcutting and erosion has been designated for future acquisition as the Wolf River Wilderness area.

The study has strong, bipartisan local government support. The Chickasaw Basin Authority, an agency of the State of Tennessee, has indicated a willingness to sponsor cost-shared feasibility studies. Shelby County has budgeted funds to initiate cost-shared feasibility studies. More than one million people live within 10 minutes of the basin and, therefore, benefits would inure to a large number of people in an area lacking sufficient outdoor recreational opportunities at this time.

In Clarksville, Tennessee, $500,000 is needed to design and construct streambank protection measures along the bank of the Cumberland River at the Clarksville fairgrounds. Fairgrounds Park in Clarksville is the city's largest and most heavily visited multi-use public park. In central Clarksville, it is bounded by two major roads and the Cumberland River.

The banks of the Cumberland River here are fairly high, averaging about 30 feet. Erosion along the banks is a result of soil failure, piping, and undercutting. These natural processes are due to soil movement and wave action against the toe of the bank slope. Erosion along the Fairgrounds Park has averaged about 3 feet per year in the past 5 years. Overlooks, walkways, picnic sites and over 40 trees have been lost due to erosion in recent years.

Historically, the most effective and economical way to stabilize the banks is to armor the slope with quarry-run stone. This stone is called "rip-rap." The rip-rap traps smaller particles, preventing them from migrating out of the bank slope. The rip-rap armament can be readily placed from the river. Equipment attached to a barge is often used along the riverbank to safely and effectively accomplish the work in developed areas. The cost of the construction would be shared 75 percent Federal and 25 percent non-Federal.

I would also ask your support for $175,000 which would be used to initiate and complete a reconnaissance study for a detailed master plan of the Riverfront Park on the Cumberland River, also in Clarksville, Tennessee. The Fort Defiance site lies along the Cumberland River just downstream of the Clarksville central business district. The site is at the Red River's confluence with the Cumberland. A major historic and natural area, Fort Defiance is a significant component of the city's long range River District development planning. A Civil War fort, Defiance is one of the best-preserved Civil War fortifications with earthen breastworks.

A master plan is needed to guide development and interpretation of the rich historic and natural resources of the Fort project. This master plan will also address issues such as public access and coexistence with adjacent neighborhoods. At the end of this year, Clarksville's riverfront development will total $3.5 million. Interpretation of the Fort Defiance historic site would highly complement existing facilities and be a major step in the realization of the riverfront vision.

With that statement, I will conclude and thank you gentlemen for listening to me today.

Mr. MYERS. Thank you for your testimony.

Mr. BRYANT. Thank you, Mr. Chairman.

TUESDAY, FEBRUARY 27, 1996.

UPPER MISSISSIPPI, MISSOURI, AND ILLINOIS RIVER PROJECTS

WITNESS

JOHN A. ROBB, CHAIRMAN, UPPER MISSISSIPPI FLOOD CONTROL ASSOCIATION

Mr. MYERS. The next witness is Ruth Culver of Uncertain Audubon Society. I thought that was a typographical error, but we don't have a witness I guess.

How about the Upper Mississippi Flood Control Association. Do you have your entire delegation here now? Your prepared statement will be placed in the record and you have 15 minutes to proceed as you would like.

Mr. ROBB. Thank you, Mr. Chairman. We appreciate the opportunity to testify before your committee again. We appreciate your efforts down through the years. As you think about all the work that has been accomplished with the Corps and how many jobs it has created, we thank you very much in the Midwest. Our Association, the Upper Mississippi Flood Control Association, includes several disciplines which are all interested in the continuing improvement of flood control, navigation, economic development, and habitat protection along the navigable rivers of the Midwest.

The Upper Mississippi, Illinois, and Missouri River Valleys are the most productive areas of the world. The navigable waterways are strategically located, almost perfectly configured, and the envy of our world trading partners.

The United States Army Corps of Engineers has transformed these great natural resources into the essential centerpiece of our Midwest economy.

In the 1930s the navigation system was modernized and our great transportation infrastructure advantage was established. However, today that infrastructure advantage is slipping and our state-of-the-art system is becoming an antique.

Those in the Midwest who provide the labor, management, and capital to keep our economic engine running have been pleading for improvements to accommodate increasing world trade. However, the environmental interests have blocked those efforts.

The Federal and State biologists lament that because of flood control and navigation, the Upper Mississippi, Illinois, and Missouri Rivers are on the verge of an ecological collapse. We must all be reminded that these same groups have pronounced a zillion other environmental collapses that have not occurred.

In early April each year, America's largest Amateur Bass Tournament is held at Quincy, Illinois, on the Mississippi River. During December of 1995, fishing experts were advising the hottest spots for the great sport fish, walleye and sauger, were by the towboats and water outlets along the Illinois River.

The most sought after hunting and fishing areas along our major Midwest rivers are in the levee and drainage districts. The levee and drainage districts produce more wildlife than the many wildlife refugees, which are all protected from flooding by levees, unless the refuges are farmed to produce a food source. Flood control projects for the Fish and Wildlife Service receive these benefits in the cost/benefit analysis, but the levee districts do not.

The greatest threat to river transportation, and the one we are most concerned about today, to transportation, recreation and fishing, is the accumulation of sand alongside the channel and in the backwaters. The Corps for the past 50 years has not removed maintenance dredge material from the floodway. The material has been placed along the beach, on islands, and in deep water. On rare occasions the material has been removed from the river.

The Midwest's navigable rivers are continuing to fill with sand and sediment. The environmentalists are promoting two solutions which are the only ones being discussed.

The first environmental solution is land treatment to prevent soil erosion.

The Soil Conservation Service, farmers and the construction industry have done a great job of reducing erosion. However, all the tributaries are already loaded with sand, enough sand to contribute to major rivers filling with sand for the next 50 years if erosion is completely stopped in the upland. We still have this supply that will continue to empty into the major rivers.

The second environmental solution is to make sure navigation and particularly flood control is hindered, diminished, or completely stopped.

This strategy is being accomplished now by delays and more studies. The environmental hype is preventing the implementation of sound policy which could stop the degradation.

In the meantime, if a city, industry, or community wants to improve their economic base by improving flood control or navigation, the idea is declared economically impossible by rigged economic formulas or environmentally infeasible because it would destroy the ecosystem. Appropriations must be withdrawn from programs that fill the floodway with rock, sand, trees, and vegetation unless the cities and rural areas are paid mitigation and flowage easements for the potential damages.

Our floodway capacity is being reduced because of inaction to remove sand from the river, plus we keep piling billions of tons of rock in the river and the Fish and Wildlife Service now has the Corps building structures out of rock to create islands which continues to fill up the floodway and interfere with navigation.

In June of 1996, barge traffic was blocked for two weeks because of sand in the channel in pool 18. When traffic resumed, tows through Lock 18 increased from 80 to 100 per week. Freight rates jumped from 250 percent of tariff to 350 percent and are yet to return to normal. The area of the blockage is a chronic dredge site and is adjacent to Iowa River Flint Creek Levee District, which is a 50,000-acre levee district and has 8 percent of the tax base of that county.

The levee district pleaded for the material to be placed on their levee and agreed to furnish the land, right-of-way, and pump the dredge water back into the river through their pumping facilities. The Corps could not choose the levee site because their cost/benefit analysis does not allow benefits for infrastructure improvements, reduction of future disaster cost, and future economic development or change cost for filling the river and pumping the same sand again and again.

The Corps must be directed to change the cost/benefit formula to reflect the real values. Midwest farmers are being told the Golden Age of Agriculture is upon us because all these importing countries are going to eat us out of house and home. These needs will be met from production areas which are able to produce and deliver with efficient transportation.

South America has millions of acres. There are 75 million acres in Argentina, grassland that has never been plowed, 150 to 200 million acres in Brazil, grassland that has never been plowed, and they have infrastructure programs there like we do. Industry tells us, our members, to try to understand just how far along they have progressed with their infrastructure, that they have a 4 to 7-year plan which is under way developing waterways, railroads and highways, and they have a 20-year plan. The 20-year plan is laid out. They are waiting for funding. When the dollars get right, then the expansion will begin.

They have said thank you very much for the grain embargo in 1980, which kick started our industry and the high exchange rates in the early eighties which continued that expansion. We have low exchange rates now, but those are going to change and the advantage is going to shift again to South America.

As a farmer, I am very concerned about it, and as I watch the river fill up with this sand, I wonder. The environmental interests say that the sediment is filling up the river, and it is a creeping death they have called it. It is going to kill the ecosystem in the river. It is also going to kill our ability to compete in this new world market.

For example, in Lock and Dam 18 next to where I farm, in the 1970s it was a 5-hour trip from Lock 18 to Lock 17. It is now a 7-hour trip. There is three areas of one-way traffic. When a barge locks through that lock it takes about 45 minutes to tear down and put back together, 45 minutes to actually lock through the lock and then the tow pulls immediately above the lock and parks for two hours and waits for the down bound to come through the one-way traffic areas. That is a $12 million piece of equipment sitting there running the freight rates up spreading the price between what I get paid and what somebody else gets paid at New Orleans and increasing the ability for South America to compete and open up more acres. That is a crisis getting ready to happen.

As far as the sand in the river, we believe we need to clean out the river. The fishermen, hunters, boaters everyone that uses the river complains about the rivers filling with sand. We believe the sand should be put on the levees and improve the flood protection. Every time in the upper valley we have had any kind of a flood control project that gives us 500-year or better protection, we have had a virtual explosion in economic development.

In the upper valley that is our coastline. It thrills me to hear what is happening because we have this navigation available on the Red River. We have navigation on the Upper Mississippi. It is becoming an antique. It needs to be improved, but we have not been able to develop it economically, and part of that problem is because we are not able to identify these economic benefits.

As you know, around the world, there is billions of dollars being spent on economic development and waterways. So for that reason our Association is asking Delta Hydraulics of the Netherlands to help us develop a conceptual plan for flood control, navigation, economic development and habitat protection in the upper valley. They have some different ways of identifying and evaluating benefits for these four disciplines, and this study is beyond the ability of our Association, although it is very cheap compared to government studies, and we would like to discuss that with your staff. We are asking for the committee to make a provision to help provide that funding if that is possible.

An area of appropriations we would like to ask for, the flood of 1993 was very costly to Quincy Illinois, a city of 50,000 residents and a place of employment of several thousand nonresidents. The Mississippi River bridge, with daily traffic of more than 12,000 vehicles, was closed for more than 3 months, leaving several thousand people cut off from their jobs.

Flood control improvements would protect critical infrastructure and promote continued economic expansion in the Quincy area. A general investigation reconnaissance study should be funded to look at the ways to protect critical infrastructure around the Quincy area and assure that interstate commerce is not disrupted in the future.

Also, we are very thankful to the committee for directing the Corps of Engineers to consolidate divisions and from that we have created the Upper Mississippi Missouri River Division. We have been dealing in past years with three divisions in the Corps and five districts. The consolidation of the Corps into one single division with five existing districts will be beneficial to the Upper Mississippi Valley and we appreciate it.

However, at this time there is a controversy over where the division office will be located. The choice to date is Omaha, Nebraska, which is sort of on the fringe of the real action going on in this division, which is flood control, navigation, economic, commerce, and we believe that the Corps would be much better served to have that division office located in St. Louis, the confluence of the three major rivers that are served.

We know there are upfront savings by not moving both offices, and creating a new office, but in the long run the traffic and lost time trying to get to a relatively remote location, we believe if the committee could do something to help the Corps in that area, I think it will pay off big dividends in the future. When the lock and dam projects go in—the Corps says we are just studying the idea, but we know it has to happen if the economy is going to prosper in the Midwest.

Mr. MYERS. We have come a long way doing this.

Mr. ROBB. They are saying it is a matter of cost savings. I think it is shortsighted, so somehow if that could be bridged. That concludes my remarks.

Mr. MYERS. Rock Island or some place like that, there is an arsenal there. There are a lot of sites I think.

Mr. ROBB. Rock Island is another site proposed. We would support the Rock Island location more—there is adequate office space though in the Saint Louis District Office, in that building.

Mr. MYERS. Thank you for your very fine testimony. The dam 18 has other problems, too, doesn't it, maintenance problems?

Mr. ROBB. They are finished. They are on up the river on lock 15 and 14.

Mr. MYERS. Thank you for your testimony. This concludes the witnesses for today. The committee stands adjourned until 10 o'clock tomorrow morning. Thank you.

[The statement of Mr. Robb follows:]

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

TESTIMONY

BY

JOHN A ROBB

CHAIRMAN
UPPER MISSISSIPPI FLOOD CONTROL ASSOCIATION

TESTIMONY

Subcommittee on Energy and Water Development

Mr. Chairman and members of the committee, my name is John Robb. I am Chairman of the Upper Mississippi Flood Control Association. The Association was formed in 1954 and has been rapidly expanding since 1993. Our membership includes several disciplines which are all interested in the continuing improvement of flood control, navigation, economic development, and habitat protection along the navigable rivers of the Midwest.

The Upper Mississippi, Illinois, and Missouri River valley's are the most productive areas of the World. The navigable waterways are strategically located, almost perfectly configured, and the envy of our World trading partners.

The United States Army Corps of Engineers has transformed these great natural resources into the essential centerpiece of our Midwest economy. Water borne commerce has been utilized since the first canoes and flatboats carried their passengers and freight up and down the river.

In the 1930's the navigation system was modernized and our great transportation infrastructure advantage was established. However, today that infrastructure advantage is slipping and our state of the art system is becoming an antique.

Those in the Midwest who provide the labor, management, and capital to keep our economic engine running have been pleading for improvements to accommodate increasing World trade. However, the environmental interests have blocked those efforts.

The federal and state biologists lament that because of flood control and navigation, the Upper Mississippi, Illinois, and Missouri Rivers are on the verge of an "ecological collapse". We must all be reminded that these same groups have pronounced a zillion other environmental collapses that have not occured.

In early April each year, America's largest Amateur Bass Tournament is held at Quincy, Illinois on the Mississippi River. During December of 1995, fishing experts were advising the hottest spots for the great sport fish, "Walleye and Sauger" were by the Towboats and Water Outlets along the Illinois River.

The most sought after hunting and fishing areas along our major Midwest rivers are in the Levee & Drainage Districts. The Levee & Drainage Districts produce more wildlife than the many Wildlife Refuges, which are all protected from flooding by levees, unless the Refuges are farmed to produce a food source. Flood control projects for the Fish and Wildlife Service receive these benefits in the cost/benefit analysis, but the Levee Districts do not.

The Midwest economy and the environment can prosper together. The Midwest economy will not prosper with the environmentalist setting our agenda.

The greatest threat to river transporation, fishing, and recreation is the accumulation of sand along side the channel and in the back waters. The Corps for the past 50 years, has not removed maintenance dredge material from the floodway. The material has been placed along the beach, on islands, and in deep water. On rare occasions the material has been removed from the river.

The Midwest's navigable rivers are continuing to fill with sand and sediment. The environmentalist are promoting two solutions which are the only ones being discussed.

The first environmental solution is land treatment to prevent soil erosion:

The Soil Conservation Service, farmers and the construction industry have done a great job of reducing erosion. However, all the tributaries are already loaded with sand. Sand does not float and rolls along the bottom. If not another grain of sand was eroded from the land, the tributaries will deliver sand for the next 50 years.

The second environmental solution is too make sure navigation and particularly flood control, is hindered, diminished, or completley stopped:

This strategy is being accomplished now. The Navigation Study is being delayed and so strongly and effectively opposed by the environmental interests that the Corps makes statements in the media like one after the recent "Upper Mississippi Environmental Summit" in Bloomington, Minnesota, " the Corps is only studying the idea.. of improving the lock & dams", (Metro State news paper article,

The environmental hype is preventing the implementation of sound policy which could stop the degradation. All the environmental confusion, misstatements, and bad ideas are creating delays while the rivers are exponentially filling with sand, more islands are being created with natural trees and tax dollar planted trees, the Corps is placing billions of tons of rock in the rivers, and building structures and islands in the river. The floodway and navigation channels are being filled in. Current actions and inactions are increasing the risk of flooding and inefficiencies of navigation.

In the meantime, if a city, industry, or community wants to improve their economic base by improving flood control or navigation the idea is declared economically impossible by rigged economic formulas or environmentally infeasible because it would destroy the ecosystem. Appropriations must be withdrawn from programs that fill the floodway with rock, sand, trees, and vegetation unless the cities and rural areas are paid mitigation and flowage easements for the potential damages.

In June of 1996, barge traffic was blocked for two weeks because of sand in the channel in Pool 18. When traffic resumed, tows through Lock 18 increased from 80 to 100 per week. Freight rates jumped from 250% of tariff to 350% and are yet to return to normal.

The area of the blockage is a chronic dredge site and is adjacent to Iowa River Flint Creek Levee District # 16. The Corps has just completed their Dredge Maintenance Management Plan for this area. The 30 year disposal site chosen is "thalweg" or in common language, dump it in the river. There are 93 dredge sites on the Upper Mississippi and Illinois Rivers that must be evaluated for 30 year disposal sites.

The levee district pleaded for the material to be placed on their levee and agreed to furnish the land, right of way, and pump the dredge water back into the river through their pumping facilities. The Corps could not choose the levee site because their cost/benefit analysis does not allow benefits for infrastructure improvements, reduction of future disaster cost, and future economic development or charge cost for filling the river and pumping the same sand again and again. The Corps must be directed to change the cost/benefit formula to reflect the real values. (see DMMP Environmental Assessment Exhibit B).

Midwest farmers are being told the Golden Age of Agriculture is upon us because of huge increases in World food needs, in the near future. These needs will be met from production areas which are able to produce and deliver with efficent transportation. Rumors in the trade are "China is looking for a long term grain deal". South Korea toured Iowa this summer with the Iowa Corn Growers and asked, "Can you produce and deliver our grain needs". The importing countries are also asking the same questions in South America.

South America has millions of acres of grass lands that have never been plowed. Argentina (75 million acres), Brazil (150 million acres) waiting for transportation infrastructure which is being quickly improved. An industry representative recently told one of our members that they are very grateful for the 1980 grain embargo which kick started their expansion. High U. S. exchange rates in the early 80's continued the expansion.

If export estimates are correct and the channel blockage this summer is an indication of our systems inability to perform, our transportation cost will go up, South America will accelerate their infrastructure and win a large portion of our export market. Will environmentalist blocking navigation improvements be the next grain embargo? Will American agriculture become the supplier of last resort because of high priced freight? Will the current U.S. trade surplus benefits be lost as a result of our inaction?

In the current schedule, the first lock will not be completed until 2010. One lock improvement will do very little to increase traffic. It will be 2020 before enough locks are completed to significantly relieve congestion.

An increase in the number of barges will help to a point, but will add to the congestion and continue to increase the price of freight. The answer is not merely more barges, but more speed, efficiency, and capacity which will reduce the freight price and hold off our competition.

The channel is being narrowed by encroachment of sand. In the 1970's the channel bouys were set as wide as possible, generally 400 to 600 feet wide. The channel is being narrowed by sand encroachment to 300 feet and less in many areas causing one way traffic. Two tows passing is 220 feet of steel. A little tight in a 300 foot channel with wind and current to contend with.

In the navigation pools huge islands are growing that were not there in 1988. In the 70's the trip from Lock 18 to Lock 17 was 5 hours. Today that trip is 7 hours because of one way traffic areas. In times of high traffic, the up bound tow locks through Lock 18, 45 minutes to break apart and reassemble, and 45 minutes to lock through, and parks immediatley above the lock for 2 hours and waits to meet the down bound tow who is coming down river through 8 miles of one way traffic. All pools on the Lower Illinois and on the Mississippi between Pool 26 and 15 have one way traffic delays which increase with more traffic.

All along the navigable rivers the land elevation between the levees is rising as the floodway fills with sand and sediment. It is particularly bad along the Lower Illinois River where the elevation is 3 to 10 feet higher inside the floodway than outside the levee.

The Navigation Study schedule is slipping. The funding must be made available to the maximum Corps capability to insure several lock and dams are completed by 2010. The major rehabilitation of Lock and Dams 25 and 24 should begin as soon as possible. All one way areas must be deepened and widened to decrease traffic delays during the next 15 years. Floodway disposal of maintenance dredge material must be immediately prohibited. The building of channel training and habitat structures must be prohibited unless absolutely essential to protect navigation, prevent bank erosion, and proper mitigation is arranged with affected property owners.

The latest solution proposed by the environmental industry is a draw down of water levels, (see exhibit A). A draw down will be devastating to navigation with a 9 foot channel and especially with increased exports. A 12 foot channel can be accomplished by cleaning material out of the rivers to avoid seepwater damage to adjacent property. A 12 foot channel will be needed to support a doubling of exports over the next 15 years. A 12 foot barge hauls 40% more freight than a 9 footer for nearly the same money.

A 3 foot draw down of a 12 foot channel would not devastate navigation and would accomodate the biological interest, if the environmental interest find a way to mitigate filling the floodway with more vegatation. The material removed for the 12 foot channel would help to clean the river and if placed upon the levee system would reduce disaster cost and promote a tremendous economic development of good paying jobs like our trading partners are developing along their waterways. A classical win win situation.

In order for America to remain competitive in the 21st century, Congress needs to do everything in its power to improve productivity and efficiency in terms of industrial and agricultural output and improvements in infrastructure. It is imperative that we look upon such resources as the Mississippi and other rivers on the inland navigation system as the nations "other" coast.

It is essential to develop a comprehensive or "system wide " approach of flood control for the Upper Mississippi Valley. A system approach, complete with improved forecasting would provide superior flood damage reduction for urban areas, economic development, agriculture, navigation, and habitat protection. The basin states of Illinois, Missouri, and Iowa have called for a comprehensive system approach.

The World is investing $100's of billions in infrastructure, of which a large portion is waterway improvements. Something must be done to stop America's rapid decline in our infrastructue advantage. It is almost impossible for the Corps to fully value waterway improvements because of the strong environmental bias in cost/benefit analysis imposed by various Administrations and the Corps. There is a need for another view using the values currently being used by our World trading partners to invest in waterway infrastructure and associated development.

The Association has been working with Delft Hydraulics of The Netherlands in the development of a conceptual plan for flood, control, navigation, economic development, and habitat protection for the Upper Mississippi Valley. Delft Hydraulics has been very successful in implementing balanced plans because of fairly valued benefits for all disciplines.

Although the cost of this preliminary study will be very inexpensive as compared to government implemented studies, the funding is beyond our association's capability. Since this work could be the tool that can bring all the different factions together and benefit the entire Midwest, we are requesting that the Committee find a way to authorize and provide funding to the Association for this study.

It is imperative that we revisit the hydrologic and hydraulic characteristics of the Midwest Rivers. If a farmer or developer near Hannibal, Missouri, is told conflicting stories by different agencies that the flooding he has experienced during the past 30 years, was a "100 year" flood, a "200 year flood", and over a "500 year flood" he has reason to doubt the governments technology in estimating these probabilities.

The White House Inter-Agency Floodplain Review Committee recomended in 1994 that the method for flow frequency determinations be reviewed. In addition, the "Floodplain Management Assessment of the Upper Mississippi and Lower Missouri Rivers and Tributaries report conducted by the Corps in June 1995 also recommended that the profiles should be revisited.

Nothing has been accomplished to date regarding these recomendations. It is time the government restored the public faith in flood profiles. The committee should direct the Corps to re-examine the flood profiles for the Upper Mississippi Valley.

The flood of 1993 was very costly to Quincy, Illinois a city of more than 50,000 residents and the place of employment of several thousand nonresidents. The Mississippi River bridge with daily traffic of more than 12,000 vehicles was closed for more than 3 months, leaving several thousand people cut off from their jobs. Flood control improvements would protect critical infrastructure and promote continued economic expansion in the Quincy area.

A General Investigations Reconaissance Study should be funded to look at ways to protect critical infrastructure around the Quincy area and assure that interstate commerce is not disrupted in the future.

The direction given to the Corps by this Committee to consolidate Divisions is very much appreciated by our Association. The proposal by the Corps to form a new Upper Mississippi Missouri River Division which will have the five Districts in the Upper Valley under one Division instead of the present three divisons will be a great benefit to the people served.

However, the Corps is planning to establish the Division Office in the existing Missouri River Division Office in, Omaha, Nebraska. The center of division work load, of engneering, contruction, flood control, navigation, and maintenance will by at the confluence of the three great rivers served, at St. Louis Missouri. The Omaha site would have to be considered a remote location.

The move to Omaha is being touted as a cost saving measure, but is very short sited. The savings of the initial move will soon evaporate in lost time and travel expense by Corps personnel, federal and state agencies, citizens, customers, and contractors. The Association is requesting that this Committee give a directive and provide the funding, if actually necessary, to centrally locate the new Division Office in St. Louis, Missouri.

We support an addition or continuation of funds for the following studies and projects at whatever level is needed to proceed to project implementation as quickly as possible.

- Nutwood Drainage and Levee District Levee Raise, Jersey and Green County, Illinois,

- City of Ste. Genevieve Levee Construction, Ste. Genevieve County, Missouri.

We strongly support the Corp's Continuing Authority Program which encompasses both flood control and navigation. We view this program as being especially vital because more than any other single program, it has the ability to respond quickly to a variety of needs experienced by communities, counties, and drainge and levee districts. The need for small flood control projects is especially great, and these authorities need to be funded at or near their authorized levels to ensure that these needs are met.

Projects of special importance to the Association include Section 205 projects for the following:

- Bois Brule Drainage District,
- Degonia Fountain Creek and Grand Tower Drainage and Levee Districts,
- Prairie du Rocher Drainage and Levee District,
- St. Peters, Missouri.

The foregoing items of current activity are needed now. We believe these projects are an important portion of a comprehensive plan that supports improved flood control, navigation, economic development, and habitat protection.

It is essential to actively develop the economic potential of this system to maintain environmental integrity in the World, assure America's economic position in the World, and provide good paying jobs for the Midwest.

The Association appreciates the opportunity to testify before the committee and thank you for your consideration of these requests.

I would like to leave you with these final thoughts.

Please, do not make the theme of this campaign or your efforts in Congress, Medicare, Retirement, and the Environment. The theme must be good paying jobs. Infrastructure provided by the government and utilized by private interprise will produce good jobs which will provide for medicare, retirement, and the environment. A strong economy must lead the parade or we will all rape the environment and retire in the poor house. Thank you very much.

Exhibit B

ENVIRONMENTAL ASSESSMENT

DREDGED MATERIAL THALWEG PLACEMENT SITE

MISSISSIPPI RIVER MILES 417.8 - 418.7
BENTON ISLAND, POOL 18

JANUARY 1996

US Army Corps
of Engineers
Rock Island District

III. ALTERNATIVES

A. No Action/No Change. The No Action alternative would preclude Federal involvement in the project. As a result, no dredging will occur. However, if this area is not dredged, it is possible that shoaling could close the channel to commercial navigation. This would present an unacceptable risk to human life, and significant economic hardship if corrective action is not taken within a much shorter period of time than what is required under standard procedures. The No Action alternative is not a feasible alternative, being contrary to the congressional mandate to maintain a commercial navigation channel.

The No Change alternative (no change from previous course of action) may potentially result in environmental degradation of aquatic and terrestrial habitat adjacent to historic placement sites. Continued long-term placement of material from the Benton Island dredge cut along the historically used beaches, at the frequency that has occurred in the past, could lead to unacceptable natural resource impacts.

B. Beneficial Use. The beneficial use of dredged material is always pursued and has to date consisted of beach nourishment on the main channel side of Benton, Jacoby, and Camp Islands.

Two potential sites were identified for confined placement behind the Iowa River-Flint Creek Levee and Drainage District. These two sites are located at RM 419.45 - 420.05R and 419.20 - 419.45R. At the present time, both sites are considered to be operationally infeasible, based on cost and logistical problems associated with accommodating return water from dredging operations. Time constraints, associated with anticipated potential dredging requirements early in the 1996 dredging season, also prevent these sites from being considered feasible to meet short-term needs. For these reasons, the behind-levee placement sites are not evaluated in detail in this EA.

The behind-levee placement sites, with the thalweg site, are currently being evaluated for cost effectiveness, operational feasibility, environmental acceptability, and other criteria, in the District's Dredged Material Management Plan (DMMP) process for long-term dredged material placement. The DMMP final report is scheduled for completion in FY 1997 using the agreed-upon evaluation matrix.

C. Terrestrial Placement. Except for the recreational beach nourishment mentioned above, no acceptable terrestrial placement sites have been identified.

D. Thalweg Placement. This is the preferred alternative. It has been identified as the least costly alternative that is both environmentally acceptable and operationally feasible. Under appropriate conditions, thalweg placement avoids impacts to more biologically sensitive and/or productive areas such as upland, wetland, or shallow water habitats, or main channel borders.

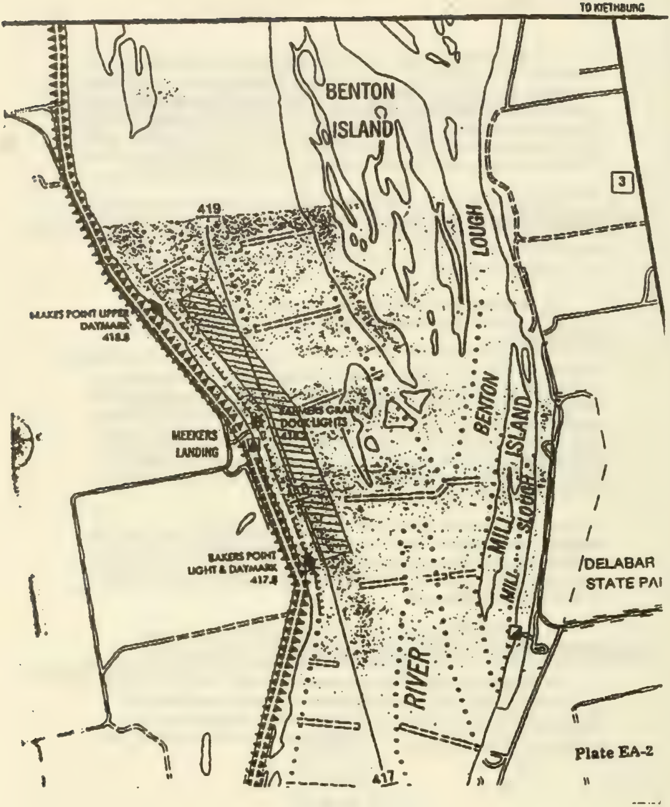
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Plate EA-2

WEDNESDAY, FEBRUARY 28, 1996.

NEW JERSEY PROJECTS

WITNESS

HON. MARGE ROUKEMA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. FRELINGHUYSEN [presiding]. The meeting will come to order. Good morning. Thank you for being here.

Let me say that I am substituting for Chairman John Myers, who could not be here this morning, but on the dais with me is the former Chairman of this committee, and in many ways is still referred to as Mr. Chairman and always will be, Congressman Tom Bevill of Alabama, who has given distinguished service to this Congress and to this committee, and I would like to enter into the record special thanks on behalf of all Members of the New Jersey congressional delegation, Republicans and Democrats, our thanks to Tom Bevill, and to John Myers. Actually the Chairman has arrived, Joe Knollenberg from Michigan. If you don't mind yielding for a second, Mr. Chairman.

Mr. KNOLLENBERG. You are doing a great job.

Mr. FRELINGHUYSEN. I wanted to pay tribute to both Chairman Bevill and Chairman Myers. They have been extremely courteous and of great assistance to all Members of Congress from the State of New Jersey long before my arrival down here. They work very closely with our former colleague and friend, the late Dean Gallo, both Chairman Bevill and Mr. Myers worked very closely with him. And there has been on this committee a real spirit of bipartisanship and congeniality that I think has worked to everybody's benefit.

Let me just make a few comments before introducing my colleagues from the New Jersey congressional delegation that are good enough to be here. One particular concern I have, again, this year and on best word is that the President may again be planning to include in his budget submittal language that would diminish the Federal Government's role in ensuring flood protection in small navigation projects. I think, Members of Congress from New Jersey, last year we expressed our concern about this policy. We hope that it will not be included in the President's budget submission for 1996 and 1997. As the Members will say, New Jersey is highly dependent on tourism to bolster and to keep our economy strong and that is something which we work on as a delegation.

And today I will be circulating a letter which I will share with my colleagues which will urge the President to continue to support what is important to New Jersey in terms of flooding and shore protection, and I will be circulating that to my colleagues and asking for their assistance in co-signing it.

It is my pleasure to recognize, right off the bat, the chairman—the dean of the New Jersey delegation, Congresswoman Marge Roukema, for a statement.

Mrs. ROUKEMA. Thank you very much. I would like to be chairman, but I am just the dean.

I appreciate your introduction, Congressman Frelinghuysen, and Chairman Knollenberg, and Mr. Bevill, we appreciate being here, and not only speaking on behalf of the delegation, but also speaking on behalf of my own constituency, I want to assert that I believe the mantra in New Jersey as you have already alluded to in one form or another, and I certainly think my colleagues here are in agreement, New Jersey is the most highly intensively populated State and densely populated State in the Nation, and our mantra is and has to be and continues to be: Health and safety first. And I think what you are going to hear today is consistent with that, and I certainly want to thank the Chairman for having the delegation testify here on the very important issues regarding energy and water on this subcommittee.

I welcome the opportunity today to bring to your attention and support my colleagues here who are speaking on issues important to the whole State and specifically to their districts, and bring to your attention the importance of a project in my own district in Oakland, NJ. As a long-time supporter of the U.S. Army Corps of Engineers' Oakland Flood Protection Project, I am committed to seeing that this project becomes a reality, and indeed, this committee has long supported the project.

Flooding along the Ramapo River has occurred 15 times in the past 24 years, and the people who live along its banks cannot continue to endure the repeated economic hardships, personal turmoil, and threat to life, property, and health that it brings. For this reason, I would like to request that this subcommittee include adequate funding for the Ramapo River at the Oakland, New Jersey Flood Protection Project.

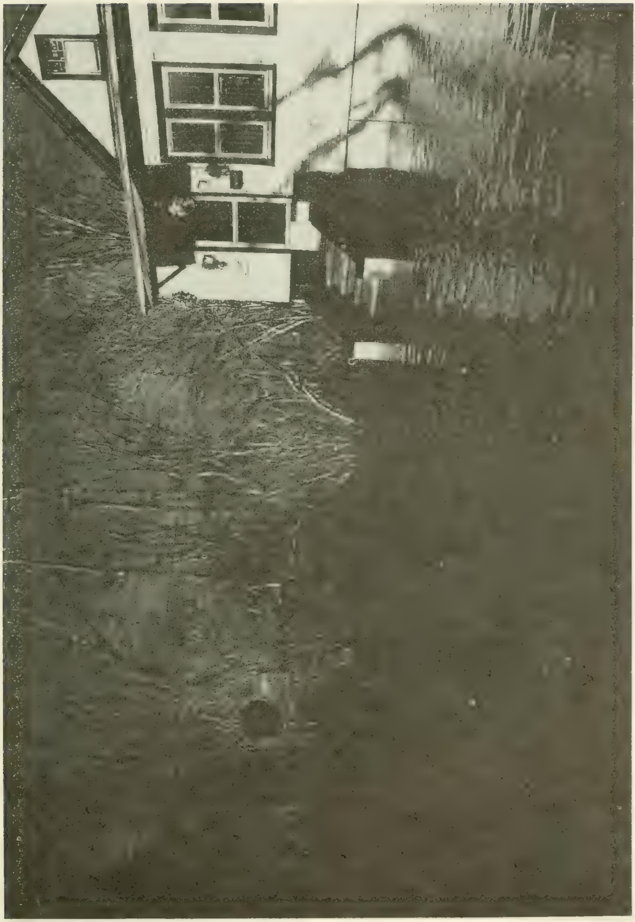
This project would provide flood protection for about 330 families along a 3.3-mile stretch. The principal problems along the river are flooding caused by the backwater effect produced by the Pompton Lake Dam, the hydraulic restrictions, and I am sure you have the other technical data before you, and we will be sure that you have all that technical data.

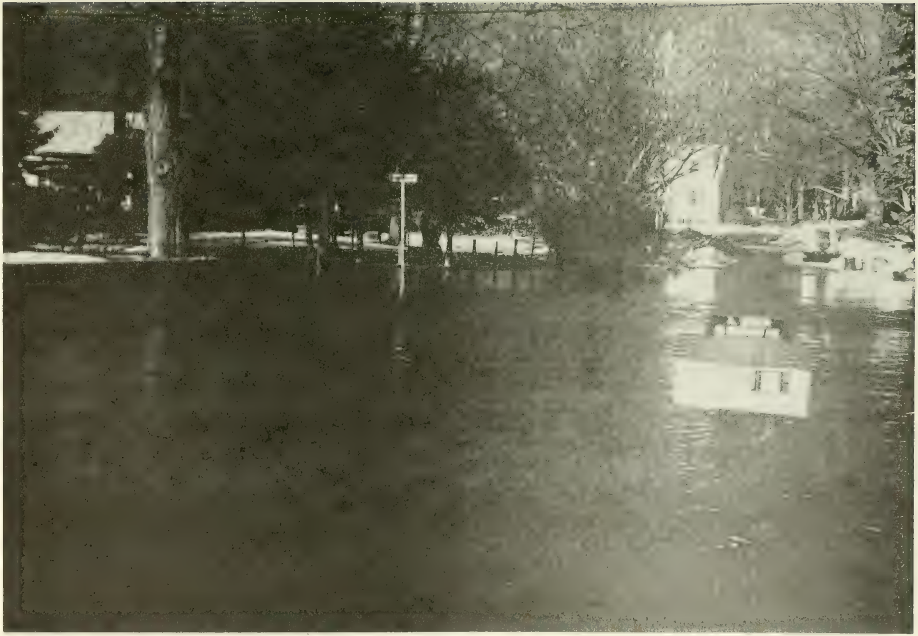
As previously stated, flooding has occurred 15 times in the last 24 years, and the most recent was on January 20th and 25th of this year. It was a combination of the blizzard, the great blizzard of 1996 that struck New Jersey, as well as some subsequent heavy rainstorms.

For your information, Mr. Chairman, and for your consideration and the consideration of the whole committee, I am going to submit some pictures that were taken at that time and show graphically, illustrate the devastation and we will submit them to you.

Mr. KNOLLENBERG. Without objection.

[The photographs follow:]





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Mrs. ROUKEMA. In the most severe case, the 1984 flood alone caused more than $9 million in damage, and the Army Corps of Engineers has estimated that another major flood would cost, at a minimum, $11 million. Clearly, the amount of money that we are seeking will be well spent. We will be penny-wise and pound-foolish to do otherwise.

The Ramapo River was studied as part of the Passaic River Basin Phase I Advanced Engineer and Design Study as early as 1976. It was included in the Water Resources Development Act. So you can see it is a continuation of strong Federal support. Congressional guidance for the conduct of the study is included in the House of Representatives Report 94–1702. The study has been authorized for the construction under the Water Resources Development Act of 1986.

Engineering design commenced in 1987, and I believe the history of this is all before you, and it is a very well-devised study and adequately substantiates the project.

I am asking the subcommittee to include $250,000 in its 1997 appropriation bill. This amount would allow the Army Corps of Engineers to coordinate with the State of New Jersey to prepare for the beginning of construction and by year's end to award a construction contract. It has been a long haul. It has been well documented and well substantiated, and I believe that this committee should look favorably upon our request.

It is my further understanding that the Transportation and Infrastructure Subcommittee on water resources is currently drafting a water reauthorization bill, and I have contacted the subcommittee and I am very optimistic that that request will be included in this reauthorization with specific language for the Ramapo River at the Oakland, New Jersey, Flood Protection Project. And we would hope that we can have your support in giving us the financial resources to conclude this by the end of the year.

Mr. FRELINGHUYSEN. Thank you, Congresswoman, for your testimony. The material you submitted is, as is everyone's prepared statement, will be put in as a matter of public record.

Mrs. ROUKEMA. Mr. Chairman, I would also request that we are able to submit this fact sheet concerning the project for the committee's record.

Mr. KNOLLENBERG. Without exception.

[The statement of Mrs. Roukema follows:]

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TRAINING AND LIFELONG
LEARNING

Statement of
Congresswoman Marge Roukema
before
Energy and Water Subcommittee
February 28, 1996

I want to thank Chairman Meyer for scheduling today's hearing and specifically for setting aside this time for the New Jersey delegation to testify on the important priorities before the Energy and Water Subcommittee.

I welcome the opportunity today to bring to your attention a project that is very important to the constituents in my district who live in the town of Oakland.

As a long-time supporter of the US Army Corps of Engineers' Oakland Flood Protection Project, I am committed to seeing that this project becomes a reality. Flooding along the Ramapo River has occurred 15 times in the past 24 years. The people who live along its banks cannot continue to endure the repeated economic hardship and personal turmoil this brings.

For this reason, I would like to request that the Subcommittee include adequate funding for the Ramapo River at Oakland, New Jersey Flood Protection Project. This project would provide flood protection for about 330 families along a 3.3 mile stretch.

The principal problems along the Ramapo River are flooding caused by the backwater effect produced by the Pompton Lake Dam, the hydraulic constrictions produced by bridges crossing the river, and insufficient channel capacity.

As I said earlier, flooding has occurred 15 times in the last 24 years -- the most recent on January 20 and January 25. For your information, I have some pictures of the January flood problem which show just how devestating this problem is. In the most severe case, the 1984 flood alone caused more than $9 million in damage and the Army Corps of Engineers has estimated that another major flood could cause $11 million in damage. Clearly, the amount of money we're seeking would be well spent.

The Ramapo River was studied as part of the Passaic River Basin Phase I Advanced Engineer and Design Study which was authorized by the Water Resources Development Act of 1976 (Public Law 94-587, October 22, 1976). Congressional guidance for the conduct of the study is included in House of Representatives Report 94-1702. The study has been authorized for

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construction under the Water Resources Development Act of 1986 (Public Law 99-662).

Engineering and design commenced in October 1987 and was completed in 1994. The project is now ready to move into the construction stage. The overall cost of the project through construction is estimated at $12 million. This cost is shared by the Federal Government (75 percent) and the State (25 percent).

I am asking the Subcommittee to include $250,000 in its FY97 appropriations bill. This amount would allow the Army Corps of Engineers to coordinate with the State of New Jersey to prepare for the beginning of construction and by year's end to award a construction contract.

It is my understanding that the Administration's budget will include a similar amount in its FY97 budget request. It is my further understanding that the Transportation and Infrastructure Subcommittee on Water Resources is currently drafting a water reauthorization bill, the Water Resources Development Act. I have contacted the Subcommittee about this project and am hopeful that the Subcommittee will agree to include reauthorization language for the Ramapo River at Oakland, New Jersey Flood Protection Project in its bill.

Again, I appreciate your providing me the opportunity to testify before you today on this most important project. I hope that you will give my request your favorable consideration, and I would be happy to answer any questions you may have or to provide you with any additional information that might be necessary.

US Army Corps
of Engineers
New York District

Ramapo River at Oakland, New Jersey Flood Protection Project

FACT SHEET NOVEMBER 1995

PROJECT PURPOSE/DESCRIPTION

The project involves the construction of features for flood protection along the Ramapo River from Pompton Lake Dam in Wayne Township and the Borough of Pompton Lakes, upstream through the Borough of Oakland to West Oakland Avenue, a distance of 3.3 miles.

The principal problem along the Ramapo River is flooding caused by the backwater effect produced by the Pompton Lake Dam, the hydraulic constrictions produced by bridges crossing the river, and insufficient channel capacity. Flooding has occurred frequently, with the most recent events in 1968, 1970, 1971, 1973, 1977, 1978, 1979, 1980, 1983, 1984, 1987, and 1993.

The April 1984 flood was the most severe causing $9,400,000 in damages (October 1994 price level). The flood had a recurrence frequency of 2 percent (a 50-year event). It is estimated that if a storm with a 1 percent recurrence frequency (a 100-year flood event) were to occur, approximately 350 structures would sustain damages, resulting in approximately $11,500,000 in damages (October 1994 price level).

STATUS

The Ramapo River was studied as part of the Passaic River Basin Phase I Advanced Engineering and Design Study which was authorized by the Water Resources Development Act of 1976 (Public Law 94-587, October 22, 1976). Congressional guidance for the conduct of the study is included in House of Representatives Report 94-1702. The study was authorized for construction under the Water Resources Development Act of 1986 (Public Law 99-662).

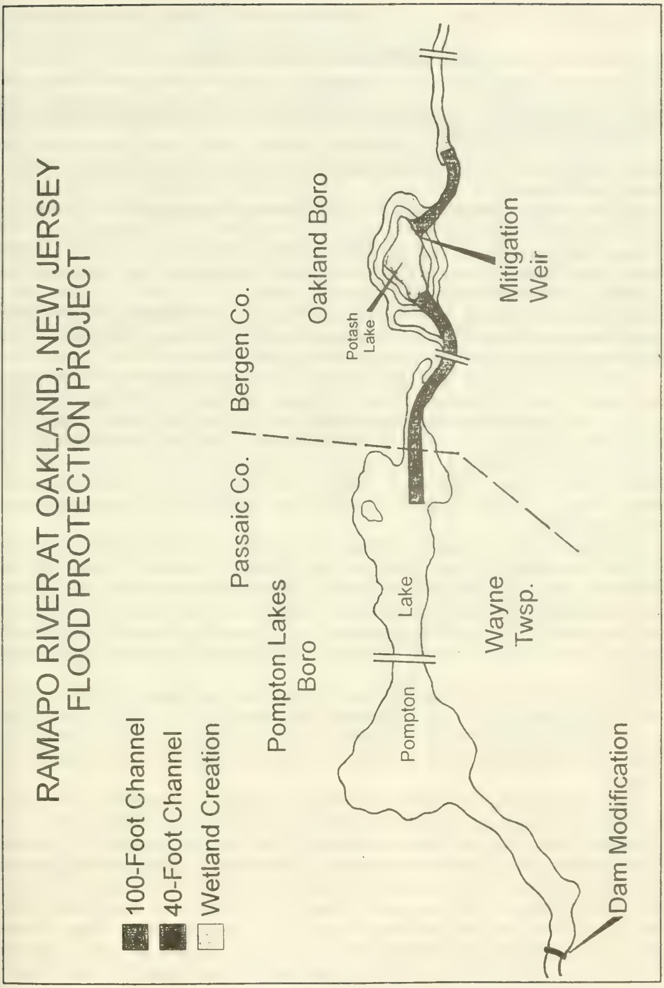
Engineering and design commenced in October 1987. The final General Design Memorandum was completed in May 1994 and approved in July 1994. Construction funds were appropriated in October 1994, the start of Fiscal Year 1995. Preparation of plans and specifications is presently underway. Before construction contracts can be awarded, the project must be reauthorized due to cost changes and a Project Cooperation Agreement must be executed with the State of New Jersey.

PLAN

The authorized plan for flood damage reduction along the study area includes channel modification of 6,800 feet of the Ramapo River. However, the Corps is recommending in the GDM 1,000 feet less in channel modification because the April 1984 flood changed the river's course and reduced the length of necessary channel modification. The authorized plan so calls for the installation of bascule flood control gates to the Pompton Lake Dam. The Corps is recommending taintor gates which will be more efficient and cost-effective. Mitigation for the environmental impacts of the plan include the creation of a five-acre wetland in Potash Lake. The recommended plan would provide a consistent 40-year level of protection to the project area.

The recommended plan in the GDM has an estimated cost of $12,000,000. The cost is shared by the Federal Government (~75 percent) and the State (~25 percent). The State share includes the cost for all lands, easements, and rights-of-way as well as a cash contribution.

CONTACT: Mr. S. J. Bucolo, Chief, or Paul Tumminello, Project Manager, Passaic River Division, U. S. Army Corps of Engineers, 80 River Street, Hoboken, New Jersey 07030. (201) 656-2304.


RAMAPO RIVER AT OAKLAND, NEW JERSEY FLOOD PROTECTION PROJECT

Wednesday, February 28, 1996

NEW JERSEY PROJECTS

WITNESS

HON. JIM SAXTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. Frelinghuysen. The Chair is pleased to recognize Congressman Jim Saxton.

Mr. Saxton. Thank you, Mr. Chairman. I appreciate the opportunity to be here.

I would say to Chairman Knollenberg, you want to make sure that when New Jersey Members are around, you are not late because you lose your chair.

Mr. Chairman and Mr. Bevill, thank you for giving us the opportunity to come here this morning to shed light upon things that are of extreme importance to the State of New Jersey.

You will note that Mr. Pallone and Mr. LoBiondo and Mr. Zimmer and I, and of course Mrs. Roukema as well, represent a State which has a long and very important coastline, and as a matter of fact, New Jersey in a way is a peninsula. We are bordered by the Delaware River on the west side of our State, and of course the Atlantic Ocean and Delaware Bay as well. And so, these matters come to us in a very urgent way and we take this committee's work very seriously.

My district, as a matter of fact, extends from the Delaware River all the way across the State to the Atlantic Ocean. I have got an economic concern with regard to the Delaware River and, of course, the economics of tourism in New Jersey are of great importance, and so your work on this committee in past years, and I am sure this year, will be of great interest and of great importance to New Jersey.

On the west side of our State, of course, we have a great neighbor in Philadelphia, and of course Camden on our side of the river is of equal importance. Currently, ships traverse the Delaware River from the ocean all the way to Philadelphia, a run of some 80 miles.

The channel in the Delaware River, which is necessary for shipping to continue, is currently dredged to a depth of 40 feet. It is no secret to all of you that modern ships require a depth of greater than 40 feet and there is currently, therefore, a Corps of Engineers project to deepen the channel in the Delaware River from 40 to 45 feet. We believe, I believe, and I think all of you are convinced, that this is a vital project which is not only important to New Jersey but it is important to Delaware and Pennsylvania as well. And so in my testimony, which I will not go into in any specific way, there is a request for money to continue the design and actual construction of this project.

On the east side of our State, obviously Mr. Pallone and I have worked together for years, and Mr. LoBiondo and Mr. Zimmer and I are currently working together, to protect what is a full 50 percent of the economy of New Jersey, and that is tourism.

I was disappointed, frankly, last year when the President's budget submission came in without monies for beach replenishment. It was eliminated in the President's request as part of the flood control monies, which were not requested.

I would commend this committee for restoring those monies last year. And to the extent that you may have mentioned earlier, Mr. Frelinghuysen, that these monies may not be requested again, we are on watch, and will be communicating with you directly about projects in our State with regard to beach replenishment issues.

There are issues that I will submit to you that have to do with requests for Tuckerton Creek, which is in the southern most part of Ocean County which we would like to have monies for dredging. We have monies that we have requested from the intracoastal waterway. We have monies that we are requesting for dredging and maintenance of Manasquan Inlet, which is north of my district, not in my district, but of very great importance to our economy, as well as other jetty repairs up and down the coast, as well as the beach replenishment projects. These things are all laid out in my written testimony, and I will at this point just submit my written testimony for your consideration.

Thank you very much.

Mr. FRELINGHUYSEN. Thank you, Congressman Saxton.

[The statement of Mr. Saxton follows:]

Statement of

Congressman Jim Saxton

Regarding Energy and Water Budget Requests

Subcommittee on Energy and Water Development
COMMITTEE ON APPROPRIATIONS

February 28, 1996

Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to testify. I request that my written statement be included as part of the record. I want to thank my colleague from New Jersey, Mr. Frelinghuysen, for organizing this opportunity to speak before this subcommittee.

I will break my remarks into two areas in which I feel that project funding is critical. Several of the projects are ongoing maintenance dredging projects in New Jersey. Funding is also requested to complete the design of a project to deepen the Delaware River Main Channel. In addition, funding is also requested to continue a beach restoration feasibility study from the Barnegat Inlet to Little Egg and to initiate a feasibility study from Manasquan to the Barnegat Inlet. I will also request funding to begin a beach restoration Reconnaissance Study for Barnegat Bay and for a New Jersey Intracoastal Waterway Environmental Restoration Reconnaissance Study. The repair of the north and south jetties in the Manasquan Inlet is also crucial to ensure a safe, stable navigation channel through the inlet.

By protecting our coastline from erosion now, not only will we reduce the amount of damage caused by storms, we will protect our number one tourist destination so that millions of people will continue to enjoy our beautiful beaches each year. I request the Committee consider the wisdom of continuing these programs which although local in nature, have such a high rate of return to the nation.

The policy behind the Administration's FY 96 budget was that funding should not be provided for Corps projects which are local in nature and lack "broad national scope". This view is short-sighted and ignores the fact that not only are beaches vital to New Jersey's economy, they have a significant impact on the national economy. Shore protection is a very good investment, particularly when you look at the low level of funding in comparison to the great economic importance of our beaches.

The Energy and Water Subcommittee appropriates funds for many local projects. If we were to follow the Administration's policy of not using federal funds for "local projects", federal projects which are vital to many individual states would no longer receive funding. Here are some examples of local projects which were funded in FY 96:

Homer Spit, Alaska, repair and extend project, $3,800,000;

Harlan (Levisa and Tug forks of the Big Sandy River and Upper Cumberland River), Kentucky, $12,000,000;

Williamsburg (Levisa and Tug Forks of the Big Sand River and Upper Cumberland River), Kentucky, $4,100,000;

Broad Top Region, Pennsylvania, $4,100,000;

Wallisville Lake, Texas, $5,000,000.

An analogy can be drawn between the funding of Corps projects and the activities of the Bureau of Reclamation. The Bureau of Reclamation often works on large projects which are parochial in nature. Just as water is vital to the economies of western states, tourism is vital to the economies of coastal states. The benefits derived from the projects of the Bureau of Reclamation and the Corps of Engineers should be addressed when determining funding.

With regard to the specific funding needs for activities in my District, I will speak to them according to funding categories.
IN THE CATEGORY OF GENERAL INVESTIGATIONS APPROPRIATIONS, I REQUEST:

a. The deepening of the Delaware River Main Channel to 45 feet is vital to the economic well being of the Pennsylvania, Delaware and New Jersey tri-state area. The Delaware River is currently maintained at a depth of 40 feet. The Deep Draft Navigation Project will increase channel depth to 45 feet. This will allow draft ships to travel the waters of the River to the ports along its shores.

This plan has significant economic and environmental factors. Newer ship designs have drafts of 42 to 43 feet. The Deep Draft Navigation Project will allow the major ports along the Delaware to compete for business with ports currently capable of accommodating the larger draft ships. It will allow existing ships to efficiently travel to Philadelphia and Camden without lightering, decreasing the risk of an oil spill.

I request that $200,000 be made available to complete the design of this project.

b. That $390,000 be made available to continue the cost-shared feasibility study from the Barnegat Inlet to Little Egg Inlet area.

c. That $500,000 be made available to initiate the feasibility study from the Manasquan Inlet to Barnegat Inlet area. The State of New Jersey is ready to participate in this study.

d. That $350,000 be made available for the Barnegat Bay Environmental Restoration Reconnaissance study, to ensure that the jobs and economic activity associated with this nationally significant Bay environment are sustained.

e. That $375,000 be made available to initiate An Environmental Restoration Reconnaissance Study for the New Jersey Intracoastal Waterway which connects the Bay environment on the New Jersey Shore and was developed prior to the National Environmental Policy Act.

IN THE CATEGORY OF OPERATION AND MAINTENANCE, I WOULD REQUEST FUNDING FOR THE FOLLOWING ACTIVITIES:

1. DELAWARE RIVER FROM PHILADELPHIA TO THE SEA

The existing channel which services the Port of the Delaware River must be maintained to its authorized depth of 40 feet.

IN ORDER TO DO THIS, I REQUEST THAT $15,300,000 BE MADE AVAILABLE.

2. TUCKERTON CREEK

The maintenance of this navigation channel is a critical piece of the economic recovery plan now actively implemented by Tuckerton Creek communities.

I REQUEST $800,000 FOR THE MAINTENANCE DREDGING NECESSARY TO ENSURE THE CONTINUED NAVIGABILITY OF THIS WATERWAY.

3. BARNEGAT INLET

Barnegat Inlet is the most heavily utilized inlet on the New Jersey coast. It is important to the Coast Guard for the movement of patrol boats through the inlet. Also required are channel surveys to advise users of actual depths available, as well as the maintenance of government-owned disposal areas for dredged material in order to assure adequate capacity for this material.

I REQUEST $1,300,000 FOR MAINTENANCE OF THIS INLET.

4. NEW JERSEY INTRACOASTAL WATERWAY

Maintenance dredging of the New Jersey Intracoastal Waterway is important to the U.S. Coast Guard for the movement of patrol boats through the waterway. Authorized for six to twelve foot channel, the engineering, design, supervision and administration of this dredging project are extremely important to keep the waterway navigable and clear.

THEREFORE, I REQUEST $2,100,000 FOR SURVEYS, MAINTENANCE DREDGING, AND MAINTENANCE OF GOVERNMENT OWNED DISPOSAL AREAS FOR DREDGED MATERIAL.

5. MANASQUAN INLET

The costs of shore erosion are varied. The negative effects of erosion can have a great impact on the tourism industry, private and commercial land owners and the public infrastructure. Beach erosion also exacerbates the vulnerability of coastal development to flood damage during hurricanes and other major storms. Beaches are critical to the U.S. economy. In 1994, travel and tourism contributed $746 billion to the Gross Domestic Product of the U.S. and provided $47 billion in tax revenue. Beaches are the number one tourist destination in the U.S., with 85% of tourist revenues spent in coastal states.

The Manasquan Inlet is one of the most heavily traveled inlets on the New Jersey coast. In the early 1980's, jetties were constructed to ensure a safe, stable navigation channel through the inlet. These jetties have functioned well over the years and are now in need of routine repairs.

I REQUEST $2,300,000 FOR THE NECESSARY JETTY REPAIRS.

Finally, I urge the subcommittee to support the recommendations of the scientific advisory group on fusion -- the Federal Energy Advisory Counsel committee -- to support the program with $275 million in FY 97. Fusion took an unusually deep cut last year -- 33% -- and the program needs time to make the transition recommended by the scientific advisors from an energy development program to a science-oriented program.

Thank you for providing me this time.

WEDNESDAY, FEBRUARY 28, 1996.

NEW JERSEY PROJECTS

WITNESS

HON. FRANK PALLONE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. FRELINGHUYSEN. The Chair is pleased to recognize Congressman Frank Pallone.

Mr. PALLONE. Thank you, Rodney and Mr. Chairman and Mr. Bevill. I will be brief.

I do want to thank you all very much because I really believe that without you, certainly without the three of you, and in particular I want to mention Rodney because he has been working tirelessly from the beginning of this Congress to try to help us out and make sure that our projects are provided funding through this subcommittee, through the full committee and also in conference. And I also want to thank Mr. Bevill because historically he has been a big supporter of our beach replenishment project as well as some of the other things that I am about to mention here today.

Just let me say I am 100 percent behind what you mentioned, Mr. Frelinghuysen, about the Army Corps' role. I am starting to hear the same thing again. I don't know if the administration's policy request is going to be exactly the same as last year, but I am hearing that they will try to change the Army Corps' role and that may mean that they are not supportive of the same level of Federal involvement in shore protection, navigation, dredging, whatever. I am fully prepared to fight that to the hilt as we did last year.

You are circulating a letter. Certainly, we are all going to sign it. We also have started a Coastal Caucus on a bipartisan basis, and one of the purposes of the Coastal Caucus is going to be to make sure that the coastal States, if you will, weigh in, as well as all 50 States that are impacted by these Army Corps projects, to weigh in to make sure that the President and the Congress knows that we want the traditional role of the Army Corps to continue with these various dredging, shore protection, flood control activities. And so we will continue to fight that.

In terms of ongoing projects, I am going to try to be brief but I did want to say that, if anything, the beach replenishment that goes from Sandy Hook down to Barnegat Inlet is really an excellent example not only of this committee's support but why we can't have the Army Corps' role changed. We know for sure that if it wasn't for the fact that the Federal Government contributed the amount of dollars that they did, and the expertise that they provide with their engineering, et cetera, that it would not be possible for the State of New Jersey or local municipalities to come up with their matching share.

Right now they complain about the fact that the State has to put up the money that it does based on the existing formula, and certainly the local municipalities say the same thing. If it were not for the fact that the Federal Government was contributing as much as it was to the beach replenishment project, it would not happen. Not any sand at all would be placed on the beaches. So thank you for your support.

This year I am asking for $24 million to continue construction from Sandy Hook down to Manasquan Inlet. Basically that completes the northern phase of the project, starts the Long Branch phase of the project, begins the project from Manasquan to Shark River Inlet and also provides funds to continue the completion of the project through the next fiscal year.

At the same time, you have been very generous in providing funding to do the reconnaissance and now the feasibility study for the Raritan Bay and Sandy Hook Bay. This is another flood control project that is in the northern part of my district. We are asking for $700,000 to continue the feasibility phase of this in fiscal 1997.

We are asking for $350,000 to actually begin plans and specifications for beach renourishment extensions in Old Bridge, Keansburg and North Middletown. This is a core project already on the books that we would like to see renewed.

I have some navigation projects that we would like to have carry over funding in the Shark River and Cheesequake Creek. In the South River, we have a levee protection program that you helped fund last year and we want to continue.

I wanted to mention two other things and then I will stop.

The Continuing Authorities Program, as you know, was cut back somewhat last year but this is very important to my district, to the State as well as to the Nation as a whole, and I hope that we can see the Continuing Authorities Program fully funded this year.

I have some small flood control projects that are in my district, and Mr. Zimmer's, that were not funded through the Continuing Authorities Program this year because you didn't have enough money for it, and I hope that you will fully fund that program and you can continue those projects.

The last thing is contaminated dredge material disposal. As you know, we continue to dump contaminated dredge materials at the Mud Dump Site right off the coast of my district. We have been looking, both our delegation on a bipartisan basis as well as our State legislators, for alternatives to ocean disposal of this dredge material and we are hoping that we can get authorization this year, as Mrs. Roukema said, in the Water Resources Development bill in the Transportation Committee to have some sort of authorization for a State-Federal match disposal program. If that does happen, I would hope at some point in this fiscal year you would consider some funding for those disposal alternatives because it is very important to our State.

Thank you very much, Rodney.

Mr. FRELINGHUYSEN. Thank you, Frank.

We have, somewhat, time constraints here and everything will be included in the public record.

[The statement of Mr. Pallone follows:]

TESTIMONY

of

REPRESENTATIVE FRANK PALLONE, JR.

of the

SIXTH DISTRICT OF NEW JERSEY

before the

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

COMMITTEE ON APPROPRIATIONS

REVISED MARCH 6, 1996

SUMMARY

I. OPPOSITION TO PROPOSED ARMY CORPS POLICY

II. FISCAL YEAR 1997 PROJECT FUNDING REQUESTS

Project Name	Type	Phase	Amount
Sandy Hook to Manasquan Inlet	Beach Erosion	Construction	$26,000,000
Raritan Bay and Sandy Hook Bay	Shore Protection	Feasibility	$700,000
Raritan Bay and Sandy Hook Bay	Beach Nourishment	P & S	$350,000
South River	Flood Control	Feasibility	$275,000
Shark River	Navigation	Construction	$400,000 + FY96 carry-over
Cheesequake Creek	Navigation	Construction	FY96 carry-over

III. CONTINUING AUTHORITIES PROGRAM: SUPPORT AND FISCAL YEAR 1997 FUNDING REQUESTS

Project Name	Type	Amount
Mill Brook	Flood Control	$135,000
Poplar Brook	Flood Control	$150,000

IV. COST SHARING FOR CONTAMINATED DREDGED MATERIAL DISPOSAL ALTERNATIVES

INTRODUCTION

Mr. Chairman, thank you for giving me and the New Jersey Delegation this opportunity to testify before the Subcommittee. This subcommittee has always been very generous to our state, and I think we have worked well together to elevate the quality of life of New Jersey residents. I look forward to working with you and your members once again during this most unprecedented fiscal year.

I am here to make appropriations requests for Fiscal Year 1997 that are critical to protecting our coastal environment as well as the health and safety of the people who live in Central New Jersey.

Like last year, I would like to voice my strong opposition to any modification to the Army Corps of Engineers historical participation in flood control, shore protection, and shallow draft navigation projects. In addition, I would like to make specific appropriations requests for ongoing projects taking place in my district. Finally, I would like to briefly discuss the need for disposal alternatives for contaminated dredged materials.

THE PROPOSED NEW ROLE OF THE ARMY CORPS OF ENGINEERS

Once again, I must vehemently oppose any alteration to the Army Corps of Engineers's historical role in flood control, shore protection, and navigation projects. Although the Administration's FY 1996 proposal was wisely rejected by both the House and the Senate, it is my understanding that some change in policy is still being adhered to by the Administration for Fiscal Year 1997.

Changing the Army Corps's role would be devastating to communities nationwide, particularly along our nation's coasts where the majority of the U.S. population resides. Without continued federal support, most projects currently being conducted by the Army Corps would simply not be done because States, including New Jersey, do not have the wherewithal to carry them out. States do not have the money to incur the full costs of current Army Corps Projects, nor do they possess the engineering and infrastructure knowledge that belongs to the Corps.

Unfortunately, should the Army Corps's ability to participate in much needed flood control and shore protection projects continue to be hindered, the costs resulting from the absence of these projects will far outweigh any estimated budgetary savings from downgrading the role of the Army Corps.

Rather than basing the significance of projects on arbitrary policies and proposals, decisions on Federal participation in flood control, shore protection, and navigation should continue to be based on project benefits as compared to project costs.

ONGOING DISTRICT PROJECTS

Several projects are ongoing in my district that are crucial to the health and safety of New Jersey's shoreline, its residents, and its many visitors. I would like to thank the Subcommittee and the Committee for their continued funding and support for these projects.

The timely appropriation of adequate funds has served greatly to keep these vital projects on track, providing invaluable protection for our beaches and our beach residents. This subcommittee should be lauded for its successful performance last year during a very difficult appropriations process.

In order to recognize the beneficial work that is being done by the Army Corps in my district, I would like to briefly address each of the projects that is ongoing in my district and to request the necessary appropriations so that the Corps can continue this invaluable work in Fiscal Year 1997.

Sandy Hook to Manasquan Inlet, NJ (Beach Erosion)

I am particularly pleased with the Subcommittee and Committee support for this much needed, comprehensive beach erosion project.

A lack of sand along this area of the New Jersey coastline has left a significant number of towns in my district extremely vulnerable to damage from northeastern storms and hurricanes. Beach erosion has become so severe that in several cases, the ocean actually laps against buildings at several points along the shore.

To date, the Sandy Hook to Manasquan Inlet beach erosion project has placed much needed sand on beaches from Sea Bright to Monmouth Beach. Despite several storms this fall and the blizzard last month, the new beaches have sustained little erosion. In fact, these new beaches have performed their job extremely well-- effectively protecting property and residents along the shore during these storm events.

The project is making great progress. Replenishment activities at Sea Bright will be completed by this fall, and sand placement will begin on the Long Branch and the Manasquan north to Belmar portions of the project this spring.

I respectfully request a Fiscal Year 1997 appropriation for this project of $26 million to continue construction. FY97 funds will be used to continue placing sand on beaches in the Long Branch and the Manasquan to Belmar sections, as well as to begin construction on the remaining sections of beach from Elberon to Loch Arbour and from Asbury Park to Belmar.

Raritan Bay and Sandy Hook Bay, NJ (Shore Protection)

Several Bayshore communities remain unprotected against storm inundation, wave attack, and coastal erosion. I therefore respectfully request $700,000 to continue the feasibility phase of this study in Fiscal Year 1997 to investigate storm damage protection alternatives for this area, including Cliffwood Beach, Port Monmouth, Union Beach, and Leonardo.

Raritan Bay and Sandy Hook Bay, NJ (Beach Nourishment Extension)

The Corps previously constructed beach berms and levees in the areas of Old Bridge Township, Keansburg, and North Middletown. Erosion of the beach fill placed by the Corps many years ago in these areas has, however, increased the potential for flooding due to coastal storm inundation.

These areas do not need to be included in the feasibility study for the new Bayshore project mentioned above. Rather, pursuant to Section 934 of the Water Resources Development Act of 1986, I would like to request $350,000 in plans and specification funds for FY 1997 to provide sand for pre-existing projects in Old Bridge Township, Keansburg, and North Middletown. This new beach nourishment will alleviate the flooding problem and effectively extend the economic life of these Army Corps projects.

South River (Flood Control)

Not only does the South River have a history of flooding, but recent storms such as Hurricane Gloria in 1985 and a substantial storm in December of 1992 have threatened lives and caused extensive flood damage to residential and commercial property in Middlesex County, New Jersey.

This project would involve a system of levees for the protection of the towns of South

River and Sayreville as well as ecological restoration for the Washington Canal and the South River.

I respectfully request that the fiscal year 1997 appropriation for this project be $275,000, in order to continue the feasibility phase of this project.

Shark River, NJ (Navigation)

This existing project, adopted in 1945, provides needed access to the Belmar Municipal Boat Basin. Maintenance dredging of this project, however, has not been conducted since 1981.

Funds for maintenance dredging were appropriated in FY96 at a level of $1.19 million. I respectfully request that those FY96 funds not spent for this purpose during FY96 be carried over, and that an additional $400,000 be appropriated to complete this project in FY97.

Cheesequake Creek, NJ (Navigation)

The east jetty at Cheesequake Creek has deteriorated to such an extent that it is currently submerged at high tide, causing a severe navigational hazard.

Funds for rehabilitation of this jetty to its original height and configuration were appropriated in FY96 at a level of $2.59 million. I respectfully request that those FY96 funds that were not able to be spent for this purpose during FY96 be carried over for the completion of this project in FY97, thereby restoring the safe use of this harbor to small craft in the area.

THE CONTINUING AUTHORITIES PROGRAM

As I did last year, I would like to voice my strong support for continuation of the Corps of Engineers Continuing Authorities Programs (CAP). The CAP has been very successful in providing significant benefits at a fairly modest monetary cost, particularly to smaller communities. I again endorse this program and request that it be funded at the highest allowable level.

As you are well aware, the Administration had proposed terminating the CAP -- a proposal that was wisely rejected in last year's Energy and Water Development Conference Report.

Although this termination proposal was successfully rejected, it was unfortunate that the CAP was not funded at a level comparable to that requested in the President's budget for Fiscal Year 1996. As a result of this cut, many projects funded by the CAP were put in a "holding pattern." In other words, these projects were not able to move forward, or were significantly slowed or delayed, during FY 1996.

Two such CAP projects that were stalled during FY 1996 are located in my district. I would therefore like to request that the CAP be fully funded in FY 1997 and that language be included to designate the Mill Brook and Poplar Brook flood control projects for funding.

Mill Brook, Highland Park, NJ (Flood Control)

A persistent flooding problem along Mill Brook in Highland Park, New Jersey, has subjected the affected area to inundation and structural damage from an increase in water surface elevation as well as extreme erosion due to increased flows. Over 200 structures lie within the affected area.

I therefore respectfully request that language be included in the bill to designate $135,000 from the Continuing Authorities Program for continuation of the Mill Brook feasibility study in FY 1997. State funds are available to support this project.

Poplar Brook, Monmouth County, NJ (Flood Control)

Poplar Brook in Monmouth County, New Jersey, regularly overflows. Flooding from the brook forces senior citizens from their homes at the Poplar Village retirement apartments, threatens a sewage treatment plant in Ocean Township, and regularly fills streets in neighboring Deal.

I therefore respectfully request that language be included in the bill to designate $150,000 from the Continuing Authorities Program for the Poplar Brook feasibility study in FY 1997. State funds are available to support this project.

CONTAMINATED DREDGED MATERIAL DISPOSAL ALTERNATIVES

Cost-Sharing for Contaminated Dredged Material Disposal

The Port of New York/New Jersey is in dire need of contaminated dredged material disposal alternatives. This material is categorized as Category I, II, or III as the level of contaminants becomes more severe. Currently, the only disposal option for Category I and II sediments is the Mud Dump Site which is rapidly nearing capacity, and there are no disposal options for Category III.

Despite the high cost, local authorities now shoulder full financial responsibility for disposal projects even though the federal government often conducts a significant percentage of dredging activities. To remedy this situation, I am seeking authorization this year for federal cost sharing of confined disposal facilities, decontamination, and pollution reduction projects. I would urge the Subcommittee to consider appropriations for such disposal projects.

WEDNESDAY, FEBRUARY 28, 1996.

NEW JERSEY PROJECTS

WITNESS

HON. FRANK LoBIONDO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. FRELINGHUYSEN. I would like to recognize Frank LoBiondo, to be followed by Congressman Dick Zimmer.

Mr. LOBIONDO. Thank you, Mr. Chairman, and Mr. Bevill. We very much appreciate the subcommittee's time and effort in this matter.

The Army Corps of Engineers conducts a wide range of projects in southern New Jersey, and their assistance in harbor dredging and beach replenishment over the years has proven invaluable in the effort to counter erosion and water encroachment, as well as making navigation through the inlets far less dangerous for both recreational and commercial fishermen.

In light of several storms that have battered the eastern seaboard, the Corps of Engineers' work in southern New Jersey is critical, and I believe that the New Jersey coast has more than its fair share of natural abuse.

I was sorry, like my colleagues, to learn the administration has again apparently embarked on a policy that does not recognize the importance of many of these projects. I think this short-sighted approach will be countered by those who understand the complexity of the problem and what needs to be done.

Let me point out, Mr. Chairman, as some of my colleagues have, an important statistic: The New Jersey shore generated half of the State's $23 billion tourism industry. This is not about people getting a sun tan. This is about jobs and the economy and as the fiscal year 1997 budget moves forward, I would like to submit before the subcommittee a list of planning, construction and maintenance projects to be undertaken by the Corps of Engineers. In the interests of time, Rodney, I will just submit this to the subcommittee, and thank you very much for your consideration and help with our projects.

Mr. FRELINGHUYSEN. Thank you for your testimony and what you have submitted will be included as part of the record.

[The statement of Mr. LoBiondo follows:]

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Banking and Financial Services
Subcommittees:
Capital Markets, Securities and Government Sponsored Enterprises
Domestic and International Monetary Policy

Small Business
Subcommittees.
Regulation and Paperwork
Tax and Finance

Statement of Rep. Frank A. LoBiondo (NJ-02)
before the Energy and Water Subcommittee,
Committee on Appropriations
February 28, 1996

Thank you, Mr. Chairman, for the opportunity to testify, and I thank the members of the subcommittee for their time and attention.

As you may know, the Army Corps of Engineers conducts a wide range of projects in southern New Jersey. Their assistance in harbor dredging and beach replenishment over the years has proven invaluable in the effort to counter erosion and water encroachment, as well as making navigation through inlets far less dangerous for both recreational boaters and commercial fishermen.

In light of several storms that have battered the eastern seaboard, the Corps of Engineers' work in southern New Jersey is critical. I believe the New Jersey coast has had more than its fair share of natural abuse.

I am sorry to learn, however, that the Administration has again chosen to ignore these facts and omitted funding for new beach replenishment and harbor dredging projects in the Corps of Engineers budget in Fiscal Year 1997. This is a short-sighted approach that met with overwhelming opposition from Members on both sides of the aisle during last year's budget debate. I do not understand why the Administration would continue with this misguided policy. Clearly, it is a detriment and hindrance to business and tourism along the New Jersey coastline.

Mr. Chairman, let me point out an important statistic here: the New Jersey shore alone generated **half** of the state's $23 billion dollar tourism industry in 1994.

As the Fiscal Year 1997 budget process moves forward, I would like to submit before the subcommittee a list of planning, construction, and maintenance projects to be undertaken by the Corps of Engineers. Mr. Chairman, I would first like to go on record in support of all ongoing projects. Second, I am respectfully requesting from the Energy and Water Subcommittee that funding be appropriated for three new Corps of Engineers planning studies that will most likely not be included in the budget submitted by the Administration.

The three planning study projects are as follows: (1) an interim Preconstruction, Engineering and Design Study from Brigantine Inlet to Great Egg Harbor Inlet/Absecon Island, at $950,000; (2) a Feasibility Study from Great Egg Harbor Inlet to Townsends Inlet, at $500,000; and (3) a Preconstruction, Engineering and Design Study from Townsends Inlet to Cape May Inlet, at $500,000.

Mr. Chairman, I fully support these planning studies because of their potential value to commerce, both large and small, in southern New Jersey. I have spoken to officials in the municipalities affected by the Corps of Engineers projects, and their message is clear. Without beach replenishment, property damage due to erosion will be impossible to repair. And without the beaches to attract the wide variety of seasonal visitors who converge on the New Jersey shore each year, the prospects for thousands of small business owners will be grim at best.

The same can be said for harbor dredging. Erosion patterns have formed shoals in inlets, making navigation considerably difficult for recreational and commercial fishermen. Mr.

Chairman, commercial fishing represents a $100 million industry in New Jersey. Simply halting Corps of Engineers activities around the second largest commercial port on the Eastern Seaboard -- Cape May -- would be devastating. Dredging projects will also preserve the $38 million dollar charter and party boat industry, as well as the salt water recreational fishing industry -- which accounts for close to $450 million in retail sales annually.

In conclusion, Mr. Chairman, continued funding for the Corps of Engineers projects represents an investment in small business and tourism, as well as a commitment to safe navigation for those who routinely access the Atlantic Ocean for work or pleasure.

Thank you for this opportunity to testify, and for your efforts to aid the New Jersey shore in the past. I ask permission to submit a detailed statement for the record.

Corps of Engineers Projects, Second Congressional District

PROJECT	ESTIMATED FY 97 FUNDING	COMMENTS
Planning Studies (GI)		
* Great Egg Harbor Inlet to Townsends Inlet Feasibility Study	$500,000	New Start (Add)
Lower Cape May Meadows - Cape May Point Feasibility Study	$230,000	Continuing
Del Bay Coastline, DE & NJ Feasibility Study	$460,000	Continuing
Brigantine Inlet to Great Egg Inlet Feasibility Study	$130,000	Continuing
* Brigantine Inlet to Great Egg Inlet - Absecon Island Interim - PED	$950,000	PED New Start (Add)
Townsends Inlet to Cape May Inlet Feasibility Study	$45,000	Continuing
* Townsends Inlet to Cape May Inlet - PED	$500,000	PED New Start (Add)
Delaware River Main Channel - PED	$160,000	Continuing PED
New Jersey Intracoastal Waterway Dredged Material & Env. Restoration - Reconnaissance Study	$370,000	New Start
Construction (CG)		
Cape May Inlet to Lower Township	$2,000,000	Periodic Nourishment
Great Egg Harbor Inlet & Peck Beach	$380,000	Monitoring / Nourishment
Operation and Maintenance		
Cold Spring Inlet	$500,000	Maintenance Dredging
Delaware River, Phila to Sea	$14,200,000	Maintenance Dredging
New Jersey Intracoastal Waterway	$2,100,000	Maintenance Dredging

*** = New Starts Not Budgeted Under Administration's Policy**

WEDNESDAY, FEBRUARY 28, 1996.

NEW JERSEY PROJECTS

WITNESS

HON. DICK ZIMMER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. FRELINGHUYSEN. Congressman Dick Zimmer.

Mr. ZIMMER. Thank you very much, Mr. Chairman. I want to thank the subcommittee for inviting us to testify.

I would like to associate myself with the remarks about beach replenishment that have been made by my colleagues, but I would like to discuss at this point a project in my district that is very important to our Nation's economy and our future energy needs. I am, of course, talking about the fusion energy research that is being done at the Princeton Plasma Physics Laboratory.

We in New Jersey are acutely aware of the budget constraints facing the entire Nation, and the fusion energy research program has already made a substantial contribution to deficit reduction. Last year, funding for the fusion energy program was cut by one-third, which led to the laying off of one-third of the staff at the Princeton lab. In addition, plans to build the next-generation national fusion device at Princeton were canceled, and this year a newly restructured fusion energy program is in place around the country and at the Princeton lab in order to get the maximum research out of the existing Tokamak reactor that is currently in operation.

The Tokamak at Princeton represents a prior Federal investment in excess of $1 billion, and it continues to be the workhorse of the United States fusion research program. It has unique capabilities to conduct scientific experiments that other machines cannot. Princeton's machine has already produced world record levels of fusion power, the highest fuel ion temperature in the world, and has the potential to achieve the highest particle intensity of any magnetic fusion devise. It also has the finest and most comprehensive system of fusion diagnostics. The Tokamak at Princeton promises to solve one of the most perplexing mysteries of plasma science and fusion energy; namely, how heat and particles escape across the magnetic field in a fusion device. Understanding the so-called plasma "transport phenomenon" is of paramount importance for the development of practical fusion power and for the advancement of basic plasma science.

According to the Fusion Energy Advisory Council, the sharp funding reduction in fiscal year 1996 has brought the, quote, historically strong United States leadership role in the world of magnetic fusion energy program to an end. The Europe Community and the Japanese continue to invest twice what we do in fusion because they understand that this is a potentially cheap and abundant energy source for the next century and because of the important scientific efforts that plasma physics and fusion science research have been making.

In New Jersey, we are proud of the role that the Princeton Plasma Physics Laboratory has made in fusion energy and plasma science. And I am pleased that FEAC hails these contributions and urges that Princeton must, quote, maintain a critical mass of core competencies for national leadership and international collaboration for fusion science. For the next 2 years, the Tokamak will remain the centerpiece of the lab so that as much science can be harvested from the device as possible before it is retired.

So I accordingly urge the subcommittee to accept the new direction for the program, which I believe is very responsive to the budget constraints we face. The recommendations of FEAC will allow the U.S. to preserve the most important elements of the program: The people and the machines that constitute the fundamental research base.

I would submit for the record a letter signed by 50 Members of the House written to Energy Secretary O'Leary asking her to support FEAC's recommendation for the fusion energy program.

Mr. FRELINGHUYSEN. Thank you, Congressman. That will be included in the record as well, without objection.

[The statement of Mr. Zimmer follows:]

TESTIMONY OF CONGRESSMAN DICK ZIMMER
HOUSE COMMITTEE ON APPROPRIATIONS
ENERGY AND WATER SUBCOMMITTEE
FEBRUARY 28, 1996

Mr. Chairman, I would like to thank you and the Ranking Member, Mr. Bevill, for inviting the New Jersey delegation to testify before the subcommittee and discuss various issues and projects that are important to our state.

I would like to take this opportunity to discuss energy research taking place in my district which is vitally important to our nation's economy and our future energy needs. I am of course talking about the fusion energy research at the Princeton Plasma Physics Laboratory.

We in New Jersey are acutely aware of the budget constraints facing not just this subcommittee, but the entire Congress. The fusion energy research program has already made its contribution to deficit reduction. Last year, funding for the fusion energy program was cut by one-third, which led to the laying off of one-third of the staff at the Princeton lab. In addition plans to build the next-generation national fusion device at Princeton were canceled. This year a newly restructured fusion energy program is in place around the country and at the Princeton lab. This plan will allow the lab to get the maximum research out of the Tokamak reactor that is currently in operation.

The Tokamak at Princeton represents a prior federal investment in excess of 1 billion dollars and it continues to be the workhorse of the U.S. fusion research program. It has unique capabilities to conduct scientific experiments that other machines cannot. Princeton's machine has produced world record levels of fusion power, the highest fuel ion temperature in the world, and it has the potential to achieve the highest particle intensity of any magnetic fusion device. It also has the finest and most comprehensive system of fusion diagnostics. The Tokamak at Princeton promises to solve one of the most perplexing mysteries of plasma science and fusion energy--how heat and particles escape across the magnetic field in a fusion device. Understanding the "plasma transport" phenomena is of paramount importance for the development of practical fusion power and for the advancement of basic plasma science.

According to the Fusion Energy Advisory Council (FEAC), the sharp funding reduction in FY96 has brought the "historically strong United States leadership role in the world of magnetic fusion energy program to an end." The European Community and the Japanese continue to invest twice what we do in fusion because of this technology's potential for providing cheap and abundant energy and because of the important contributions that plasma physics and fusion science make to human knowledge. Fusion research has been responsible for fundamental advances in plasma physics as a scientific discipline, and in the development of plasma-based technologies and instrumentation techniques for practical application.

In New Jersey, we are proud of the role that the Princeton Plasma Physics Laboratory has made in fusion energy and plasma science. I am pleased that FEAC hails these contributions and urges that Princeton must "maintain a critical mass of core competencies for national leadership and international collaboration for fusion science." For the next two years, the Tokamak will remain the centerpiece of the lab so that as much science can be harvested from the device as possible before it is retired.

I urge the subcommittee to accept the new direction for the program, which I believe is very responsive to the budget constraints we face. The recommendations of FEAC will allow the U.S. to preserve the most important elements of the program: the people and machines that constitute the fundamental research base. Utilizing these investments, the program can explore new horizons in plasma physics and fusion science, while pursuing with our international partners the longer term goal of harnessing the power of the fusion energy.

Mr. Chairman every member of the New Jersey Congressional Delegation is well aware of your and Mr. Bevill's past support of fusion research and I am hopeful we can continue to count on it in the future.

Congress of the United States
House of Representatives
Washington, DC 20515

February 15, 1996

The Honorable John H. Gibbons
Assistant to the President for
Science and Technology
Office of Science and Technology Policy
Old Executive Office Building
17th St and Pennsylvania Ave NW
Washington, DC 20500

The Honorable Hazel O'Leary
Secretary of Energy
Forrestal Building
1000 Independence Ave SW
Washington, DC 20585

Dear Secretary O'Leary and Dr. Gibbons:

We are writing to express our support for a strong U.S. program in fusion energy science and technology. Specifically, we encourage the Administration to submit to Congress a recommendation of at least $275 million for the Department of Energy's fusion energy program in the Fiscal Year 1997 budget.

As you know, the Department of Energy's Fusion Advisory Committee (FEAC) has recently completed a re-examination of the fusion program. The FEAC finds that cuts in the FY 1996 fusion budget effectively end U.S. leadership in this field at a time when there is tremendous progress and opportunity in fusion energy research. The report recommends that, by restructuring the Department of Energy's fusion program and providing a modest increase over the FY 1996 level, we can maintain our research strengths and thereby ensure our nation's active participation in international fusion energy development.

The FEAC report sets three policy goals for restructuring the fusion energy program which we believe Congress will support. These goals are to advance plasma science in pursuit of national science and technology goals; to develop fusion science, technology and plasma containment innovations as the central theme of the domestic program; and to pursue energy science and technology as a partner in the international effort.

Although we are all painfully aware of the severe budgetary constraints facing our nation, we must work to ensure that the U.S. fusion program is not reduced too deeply at a time when the fusion programs of other nations are growing and progress in fusion science and technology is accelerating. The U.S. must maintain a vital and competitive presence in this most fundamental area of science and this most promising energy technology.

Finally, we want to be clear that it is not our intent that other basic energy and science programs at the Department of Energy be deprived of funding to ensure necessary funding for the fusion program. Perceived competition for funding between science programs can only hurt the strength of U.S. science and technology initiatives.

Thank you for your consideration. We look forward to the Administration's strong support of a restructured fusion energy sciences program.

Sincerely,

Roscoe G. Bartlett, MC

Tim Roemer

Tim Roemer, MC

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Randy Duke Cunningham
Randy 'Duke' Cunningham, MC

Brian P. Bilbray
Brian P. Bilbray, MC

Jim Chapman
Jim Chapman, MC

James Hayes
James A. Hayes, MC

Mike Doyle
Michael F. Doyle, MC

Robert G. Torricelli, MC

John Spratt
John M. Spratt, Jr., MC

Jim McDermott
Jim McDermott, MC

Rodney P Frelinghuysen
Rodney P. Frelinghuysen, MC

Ron Packard
Ron Packard, MC

Jerry Lewis
Jerry Lewis, MC

Duncan Hunter
Duncan Hunter, MC

Vern J. Ehlers
Vernon J. Ehlers, MC

Chris Smith
Christopher H. Smith, MC

Zach Wamp
Zach Wamp, MC

Frank Pallone Jr.
Frank Pallone, Jr., MC

Charlie Norwood
Charlie Norwood, MC

Jim Saxton
Jim Saxton, MC

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Thomas M. Davis, MC

Bart Gordon
Bart Gordon, MC

Gary A. Condit, MC

Steve Gunderson, MC

Cal Dooley
Calvin M. Dooley, MC

Donald M Payne
Donald M. Payne, MC

Carlos J Moorhead
Carlos J. Moorhead, MC

Jane Harman
Jane Harman, MC

Frank Mascara
Frank Mascara, MC

Bill Baker
Bill Baker, MC

Dick Zimmer, MC

Lindsey O. Graham, MC

Bob Filner
Bob Filner, MC

Vic Fazio
Vic Fazio, MC

Zoe Lofgren, MC

Scott L. Klug, MC

Robert Menendez, MC

Peter Torkildsen, MC

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Connie Morella
Constance A. Morella, MC

Marge Roukema
Marge Roukema, MC

Matthew G Martinez
Matthew G. Martinez, MC

Robert T. Matsui
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Richard E Neal
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Steny H. Hoyer, MC

Bill Martini
William J. Martini, MC

Joe Kennedy
Joseph P. Kennedy II, MC

Robt E. A
Robert E. Andrews, MC

Joe Moakley
John Joseph Moakley, MC

Julian C Dixon
Julian C. Dixon, MC

Sherry Boehlert
Sherwood L. Boehlert, MC

CC: Alice Rivlin, Director, Office of Management and Budget
Leon Panetta, Chief of Staff, President of the United States

WEDNESDAY, FEBRUARY 28, 1996.

NEW JERSEY PROJECTS

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HON. BILL MARTINI, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. FRELINGHUYSEN. The Chair recognizes Congressman Bill Martini.

Mr. MARTINI. Thank you very much, Congressman Frelinghuysen, Mr. Chairman, and Mr. Bevill, for this opportunity to come before you today to outline some of the concerns of our State that particularly impact in the Eighth Congressional District.

When I came before this committee last year, I spoke specifically about the concerns of the residents of the township of Wayne, New Jersey, wherein there lies a contaminated thorium site, and at that time last year we made a request, which this committee honored and we are thankful for that, and we are pleased to report back to you that on July 20, 1995, the Department of Energy awarded a contract for the removal.

This matter has been pending for 10 years. The contract was awarded, and contractors have been on the site. They have been working on the site several months of the year—last year. So the citizens of Wayne, New Jersey, are seeing some progress being made after many years of hearing Congresses in the past talking about the removal of that contaminated thorium.

I would like to at this time make a request for additional funding this year for the continuation of the removal of the contaminated soil. One of the problems is, last year's appropriation was only enough to begin the process, and the contractors were only on the site for a couple of months of the entire year. While that was good news, it also resulted in a lot of anxiety on the part of the citizens who once again lack the confidence that we are committed to this site. They have begun to speak out and indicate what is going on and why can't the contractor be on the site at least for the duration of the good weather time of the year?

So in our request this year we are asking this committee to consider funding that will enable them to be there more than just a couple of months of the year. The contractor has indicated the capability of doing that. So the request will be for additional funding to allow them to be there during the good weather of the year.

I would like to take a few moments and discuss the Passaic River Flood Tunnel. This is a matter that I know Congressman Frelinghuysen finds of great importance to him, and it is of great importance to most of the people in the Northern part of the State.

The Federal Government over the years has spent over $36.5 million studying this flood tunnel project. In fiscal year 1995 the committee spent over $17 million to finish these studies, and the study concluded that the building of the tunnel as a means of remediating this flood zone would cost over $1.8 billion. This has been a matter of considerable discussion in this area for some time now.

Today, interestingly, I am not asking this committee to spend any more additional money on the study or the feasibility of building the Passaic Flood Tunnel. Our governor, Christine Todd Whitman, has indicated her opposition to the tunnel as the means of remediating this problem, and I personally oppose the expense of building a flood tunnel and supported an alternative which would look at options such as a buyout and other means of remediating this area. I felt when I was running for Congress, and after reviewing the flood tunnel report, that the structural proposal is an environmentally inappropriate and unwise use of limited federal resources.

There are portions of the flood tunnel authorization bill, which I do support. However, to shorten my testimony—I know Congressman Frelinghuysen is aware of this—he and the governor have made a request that we do go forward and seek appropriation for the purchasing of some of the wetlands that were part of the overall design study. This would go a long way in beginning the process of alleviating the problem that exists. In turn we will be submitting a request for funding, joining with Congressman Frelinghuysen, in an effort to begin the process of acquiring some of the wetlands that are a part of this study.

Let me conclude by saying that I compliment Congressman Frelinghuysen on his efforts on the thorium site as well as the flood tunnel project, and we look forward to working with you again this year.

[The statement of Mr. Martini follows:]

TESTIMONY BY CONGRESSMAN BILL MARTINI

Mr. Chairman and Members of the Subcommittee.

I would like to thank you for giving the Members of the New Jersey Delegation the opportunity to come before you today to outline some of the concerns of our state.

When I came before this Committee last year, I spoke specifically about the concerns of the residents of Wayne, New Jersey. Located in the heart of this North Jersey neighborhood is a pile of thorium tainted soil. A pile of soil which has been in this community for several decades.

For many years the residents of Wayne were assured that the removal of this soil would occur. Yet, year after year the residents of Wayne saw no action.

Last year, when addressing this Committee, I stated, "This thorium pile is an instance where public safety is at stake, and the assistance of the Federal Government is required to improve the situation." This Committee honored that call with action.

I am pleased to report to you that on July 20, 1995, the Department of Energy awarded a contract for the removal, transportation, and storage of the soil. Only a few months later, I traveled to Wayne and witnessed first-hand the beginning of the removal. That day in front of many local residents and officials I stated, "Contrary to a lot of high rhetoric being thrown around in Washington these days, the Federal Government still cares and still has an important mission to its citizens. Be assured of this: Congress is an institution that has recognized its limitations, but also understands its obligations."

This Committee clearly understands these words. The Fiscal Year 1996 Energy and Water Development Appropriation bill specifically recommends that the Department of Energy should spend $6 million on the thorium site. I would like to thank the Members of this Committee for their efforts. Yet, $6 million only permits removal to take place for a small part of the year. The rest of the year the site will sit idle. This year I am asking the Committee to increase their efforts. As we finally begin the thorium removal it is important that we demonstrate a firm commitment to this project.

The second issue I would like to speak about is Molly Ann's Brook. This is a flood control project which runs from an area near the downtown part of Paterson, New Jersey, through the town of Haledon and incorporates a tiny portion of Prospect Park. The issue is of importance because major flooding in the 1960s and 1970s caused nearly $15 million in damages. This project will protect about 520 residents. Over the last year, I have been in constant contact with the Army Corps of Engineers about the status of the three features of this project.

As Members of this Committee may be aware, the federal share of this project is approximately $23.6 million. This Committee has been very supportive of this program and the Appropriation Conference report for Fiscal Year 1996 appropriated $3.75 million. The Army Corps is moving forward on the three aspects of this project and it is important that the Committee continues to show its support so we can finally reduce the flooding in this area.

The final issue I would like to discuss today is the Passaic Flood Tunnel. The flood tunnel is an Army Corps of Engineers project which would take flood water from the Passaic River basin and empty it into Newark Bay. Last year, after years of study, the Army Corps released the final report on the flood tunnel.

The Federal Government has spent more than $36.5 million studying the flood tunnel. In fiscal year 1995, the Committee spent $17 million to finish these studies. The study concluded that the building of the tunnel would cost $1.8 billion. Today, I am asking the Committee **not to spend** any additional federal money studying the feasibility of building the Passaic Flood Tunnel.

Governor Christine Todd Whitman has indicated her opposition to the tunnel in the past and during my campaign for the House of Representatives, I publicly opposed the flood tunnel and supported exploring other options such as a buyout. I felt during the campaign, and after reviewing the Flood Tunnel Report, that the structural proposal is environmentally inappropriate and an unwise use of limited federal resources.

On October 18, 1995, I joined with my colleague Congressman Rodney Frelinghuysen in endorsing the New Jersey's Green Acres/Blue Acres bond initiative which appeared on the November ballot. This initiative included $15 million for buyouts of the Passaic River Basin. I was pleased that this initiative passed and is one of the first steps that can be taken with respect to the flooding in the Passaic River basin.

Even though I feel, as do many other groups in North Jersey, that the tunnel should not be constructed, there are several steps that the Federal Government must take in order to minimize flood damage in this area.

In the design of the Passaic Flood Tunnel, the Army Corps proposed several sub-features of the Passaic River Main stem project. One of the sub-features is the acquisition of 5350 acres of existing wetlands.

The General Design Memorandum states: "The preservation of 5,350 acres of natural storage areas in the Central Passaic Basin is a significant flood damage reduction element in the project. The acquisition of these lands will insure the long-term maintenance of the project's degree of protection by preventing increases in flood flows that may be caused by the loss of these areas in new development." Based on several conversations with the Army Corp, they have concluded that the purchase of these wetlands would help reduce of flooding.

In December, Governor Whitman and Congressman Frelinghuysen sent letters to the Army Corps requesting that the acquisition of these wetlands be placed in their budget. In the same respect, I wrote of my interest in the wetlands acquisition to Transportation and Infrastructure Chairman Bud Shuster. I sent this letter realizing that the Water Resources Development Act was the legislative vehicle that initially authorized the Passaic River Flood project.

I am requesting that the Committee begin to take steps to appropriate funding to purchase these important wetlands. The natural storage potential for flood water will be reduced as will the potential for damage to the residents of this area. I want to publicly thank Congressman Frelinghuysen for his work with me on this issue over the last year and for putting time aside to hold this hearing today.

Thank you, Mr. Chairman.

WEDNESDAY, FEBRUARY 28, 1996.

NEW JERSEY PROJECTS

WITNESS

HON. CHRISTOPHER SMITH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. FRELINGHUYSEN. Thank you.

Congressman Chris Smith.

Mr. SMITH. Thank you, Rodney, and I thank you for this opportunity to join my colleagues from New Jersey in requesting funds for fiscal year 1997 for many of the projects that this subcommittee historically has been very, very helpful in providing, whether it be channelization, dredging, or beach erosion, beach replenishment.

This subcommittee has always been there, under Tom Bevill's leadership previously and now under yours, Mr. Chairman, and now with Rodney there we are grateful for your work. I would like to associate myself with the remarks of many of my colleagues, and, not to be redundant, I would ask that my full statement be made a part of the record.

Just to bring out a couple of points, my district includes Manasquan, New Jersey, a shore community where we have targeted beach erosion support and maintenance dredging. It cannot be overstated how crucial the Manasquan Inlet is to the fishing industry and New Jersey Shore's economic health. It is through that inlet that large deep-sea fishing vessels gain their entry to the ocean and bring back their catch.

The beach erosion program and dredging are successfully under way, but additional work is needed to secure the strength and passageway of the inlet. As part of the beach protecting program in place at Manasquan, the Army Corps of Engineers in the early 1980s installed dolosses on the top of the north and south jetties in the Manasquan Inlet.

The jetty and the specially designed dolosses are needed to break the power of the rushing waters at the entrance of the inlet and prevent erosion. After years of being pummeled by tons of water, they are cracked and eroded and less effective. I am asking today that this subcommittee seriously consider a modest amount of money to replace those dolosses. There is updated engineering. They make them stronger, more immune to corrosion, and I think it would save the taxpayers a lot of money in the long run and prevent further dredging if they were to be put in place.

And I associate myself with the remarks of Mr. Zimmer with regards to Tokamak. It is adjacent to but not actually in—my district doesn't cover that, but a lot of the people that work there live in my district, and I have become aware of the work that they do.

For the sake of our country's future with regards to energy, fusion research remains a very, very important investment because it is relatively free of contaminants, particularly if all goes according to our hopes and expectations, and it will be a tremendous source of power in the future.

[The statement of Mr. Smith follows:]

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CHRISTOPHER H. SMITH
4th District, New Jersey

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Vice Chairman
Hospitals and Health Care
COMMISSION ON SECURITY AND COOPERATION IN EUROPE
Chairman

Appropriations Subcommittee on Energy and Water
Statement of Rep. Chris Smith (R-NJ)

Wednesday, February 28, 1996

Mr. Chairman, I would like to begin by thanking the members of the Energy and Water Appropriations Subcommittee for their hard work on behalf of critical projects in the state of New Jersey. In past years, the subcommittee has supported many of our requests for funding for channelization projects, dredging, beach erosion, and beach replenishment programs. Many of the significant environmental improvements we have seen in our state, and in my district in particular, would surely have been hampered without federal support.

You may recall that my district includes Manasquan, NJ, a shore community for which we have targeted beach erosion support and maintenance dredging of the Manasquan Inlet. It cannot be overstated how crucial the Manasquan Inlet is to the fishing industry and the Jersey Shore's general economic health. It is through the Manasquan inlet that large deep-sea fishing vessels gain their entry to the ocean and where they can return with their catch.

The beach erosion program and dredging are successfully underway, but additional work is needed to secure the strength and passage way of the inlet. For instance, as part of the beach protecting program in place at Manasquan, the Army Corps of Engineers, in the early 1980s installed dolosses atop of the North and South jetties in the Manasquan Inlet. The jetties and the specially designed dolosses are needed to break the power of the rushing waters at the entrance of the inlet and prevent erosion. After years of being pummeled by tons and tons of pounds of force from the ocean, they have cracked, become corroded and less effective.

The Army Corps has plans to replace the dolosses with stronger, better reinforced structures that will continue to protect the inlet and decrease the force of the currents and tides. I strongly urge the subcommittee to see that this project to replace the dolosses receives full funding.

Every engineer, both military and civilian, has nothing but praise for the dolosse system. Since the experimental stages of the early '80s, these jack-like structures have proven to be extremely effective not only in dissipating the force of the ocean waves, but also in saving taxpayers money. The dolosses have helped to protect and extend the life of the jetties themselves, thereby reducing the number and extent of repairs done to the jetty structures and the beaches they serve to protect. Replacing these cracking dolosses with newer and better models seems only logical. And I ask that the subcommittee fully fund the Army Corps of

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Engineers project to replace the aging dolosses.

I would also like to urge the subcommittee to support the highest funding possible for the fusion energy program in the FY97 Energy and Water Appropriations bill. We in New Jersey are grateful for the support of the subcommittee for fusion over the years. In a period of cost cutting and streamlining, it is important not to lose sight of the future energy needs of our children and our children's children. I am pleased that the subcommittee has consistently continued to fund fusion energy research in the past.

I am familiar with the fusion program because the country's largest fusion scientific device -- the Tokamak Fusion Test Reactor (TFTR) -- is located at the Princeton Plasma Physics Laboratory, right outside my Congressional district. The fusion program does indeed need continued funding. Just last year, due to the 33% cut in budget, the Princeton lab was forced to lay off nearly one-third of its staff -- many of whom reside in my district. The program is now down to a skeleton staff and further cuts would damage productivity and the integrity of the program itself.

Yet, the TFTR continues to produce extraordinary scientific advancements. This device has a value that exceeds a billion dollars. Furthermore, it is a national asset, a valuable part of our national scientific infrastructure, and we should keep it operating in order to harvest as much of its unique scientific potential as possible. The fusion community understands that new construction is not in the future plans. However, to prematurely cease operation of the TFTR -- with all its possibilities and all the hard work and finances invested by some our country's finest scientists -- would seem a waste. I hope that the Committee will see fit to fund the TFTR at least through fiscal year 1998 when we can once again evaluate the progress of fusion energy.

Long-term energy research is important for our country. Our energy security impacts our national security and our economy; thus I urge the subcommittee to continue to support the fusion energy program.

Mr. Chairman, I want to once again thank the you and the members of the subcommittee for all your hard work and judicious support of our critical projects.

WEDNESDAY, FEBRUARY 28, 1996.

NEW JERSEY PROJECTS

WITNESS

HON. DONALD PAYNE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. FRELINGHUYSEN. Thank you.

The Chair recognizing Congressman Don Payne.

Mr. PAYNE. Thank you very much, Mr. Chairman.

Let me say that I appreciate also the opportunity to testify here today with projects under your jurisdiction, particularly because they are of a strong concern to the residents of New Jersey, and of course we are aware of the fiscal constraints which Congress is now operating under, but I believe that funds invested in economic growth in our State will overall be beneficial.

Let me certainly express my gratitude to you, Chairman Frelinghuysen, for bringing our delegation together in this spirit of bipartisanship which I think goes a long way; and let me also acknowledge the work of Representative Bevill for so many years who has been very kind to New Jersey.

One of the top priorities for the 10th District, which I represent, is the development of the Newark Riverfront Project. This is a sound investment which will reap considerable benefits as we work together to improve the economic status of our Nation's urban areas.

Development of Newark's riverfront is an essential piece of our overall economic and transportation redevelopment plan, a carefully thought out approach to revitalizing our city. The riverfront will form the nexus of a vibrant downtown center that will stimulate economic development and provide opportunities for the citizens of Newark, the State of New Jersey, and also to bring visitors into our region. We are hopeful that the redevelopment will attract tourists from around the Nation and the world.

Newark's riverfront development has the potential to mirror many of the successful waterfront development projects throughout this Nation. The riverfront is part of an overall effort to upgrade the city, which also includes the Newark Elizabeth Airport rail link, the enhancement of Route 21 and I–280, and the construction of the Newark Performing Arts Center which will be the state of the art in the Americas.

The development of the riverfront offers a once-in-a-lifetime opportunity to tie together these important components in order to reinvigorate and rebuild one of America's third oldest cities after New York and Boston, founded in 1666, as a matter of fact. The Army Corps of Engineers—that is the history teacher, Rodney——

Mr. FRELINGHUYSEN. This is all on the record.

Mr. PAYNE [continuing]. Has reported that in fiscal year 1997 we need just $900,000 to move ahead on this important riverfront project. I strongly support this request and hope that the subcommittee will give it favorable consideration.

Let me also say that I support the request of the Port Authority of New York and New Jersey for funds to carry out crucial design, construction, and maintenance of essential navigation projects under the U.S. Army Corps of Engineers civil works program.

Of particular importance is the Kill Van Kull and the Newark Bay Channels, a New York/New Jersey harbor deepening project authorized in 1980 under the Supplemental Appropriations Act and the Water Resources Development Act.

Now that phase 1 of the project, deepening the channel from 35 to 40 feet, is nearly completed, I think we should quickly move into phase 2, which would deepen it to 45 feet. The Port Authority has requested that the Army Corps reestimate the cost of phase 2. Timing is critical because we feel that it is very urgent. I urge my colleagues to approve the $750,000 in fiscal year 1997 to complete the general reevaluation report that is urgently needed.

Let me conclude by saying that I think that the dredging is important, but a solution to the problem of disposal of dredge materials unsuitable for ocean disposal must be looked at, as the Port Authority has pointed out, if funding for channel maintenance construction is withheld. Because disposal sites haven't yet been identified, it will only compound the problem. It is critical that funds be allocated to enable implementation.

Once suitable disposal sites become available, approval of the $30 million request for maintenance dredging construction will reap economic benefits and will ensure the reliability of our ports for the shippers and vessels that pay for their use.

Also, as Congressman Zimmer and Congressman Smith have indicated, although it is not in my district, nor do many people in my district work there, I strongly support the fusion program housed at Princeton Plasma Physics Laboratory because it will give the United States a continuing lead in fusion energy research. As we move into a technological world and a world where economic war is going to be waged through nations, I think we need to be ahead of the curve, and I think this would be a great investment for America.

[The statement of Mr. Payne follows:]

TESTIMONY OF CONGRESSMAN DONALD PAYNE

Mr. Chairman, members of the Subcommittee, I appreciate the opportunity to testify here today about projects under your jurisdiction which are of particular importance to the state of New Jersey.

While we are all aware of the fiscal constraints under which Congress is operating, I believe that funds invested in economic growth and development will bring considerable long-term benefits.

Let me express my gratitude especially to my friend and colleague Rodney Frelinghuysen for inviting members of the New Jersey delegation to present our requests before the Subcommittee. His spirit of cooperation and bipartisanship always makes it a pleasure to work with him.

One of the top priorities for the Tenth Congressional District which I represent is development of the Newark Riverfront project. This is a sound investment which will reap considerable benefits as we work together to improve the economic status of our nation's urban areas. Development of Newark's Riverfront is an essential piece of our overall economic and transportation redevelopment plan, a carefully thought-out approach to revitalizing the city. The Riverfront will form the nexus of a vibrant downtown center that will stimulate economic development and provide opportunities for the citizens of Newark, the state of New Jersey, and also for visitors to our region.

We are hopeful that the redevelopment will attract tourists from around the nation, and even the world. Newark's riverfront development has the potential to mirror many of the other successful waterfront development projects nationwide.

The Riverfront is part of an overall effort to upgrade the city which also includes the Newark Elizabeth Airport rail link; the enhancement of Route 21 and I-280, and the construction of the New Jersey Performing Arts Center.

The development of the Riverfront offers a once in a lifetime opportunity to tie together these important components in order to reinvigorate and rebuild one of America's three oldest cities (along with New York and Boston).

The Army Corps of Engineers has reported that in FY '97 it needs just $900,000 to move ahead with this important Riverfront project. I strongly support this request and hope that the Subcommittee will give it favorable consideration. It is a great example of an exciting public-private partnership.

Let me also say that I support the request of the Port Authority of New York and New Jersey for funds to carry out crucial design, construction and maintenance of essential navigation projects under the U.S. Army Corps of Engineers Civil Works program. Of particular importance is the Kill Van Kull and Newark Bay Channels, a New York/New Jersey harbor deepening project authorized in the 1980s under the Supplemental Appropriations Act and the Water Resources Development Act. Now that Phase One of the project, deepening the channel from 35 to 40 feet, is nearly complete, it is crucial that we move to Phase Two, the deepening of the Channel to 45 feet. The Port Authority has requested that the Corps of Engineers re-estimate the cost for Phase Two. Timing is critical; we must keep this project on track because steamship lines have told us that, as they make key business decisions, their future use of our ports is dependent on the completion of the channel deepening. I urge my colleagues to approve $750,000 in Fiscal Year 1997 to complete the General Re-evaluation Report so that urgently needed construction can resume.

Let me stress again, as we did last year, the urgency of finding a solution to the problem of disposal of dredged material unsuitable for ocean disposal. As the Port Authority has pointed out, if funding for channel maintenance construction is withheld because disposal sites have not yet been identified, it will only compound the problem. It is critical that funds be allocated to enable implementation once suitable disposal sites become available.

Approval of the $30 million request for maintenance dredging construction will reap economic benefits and will help ensure the reliability of our ports for the shippers and vessels that pay for their use.

Let me mention also my support for the fusion program housed at the Princeton Plasma Physics Laboratory. Funding of this program will allow the U.S. to continue playing a leading role in advancing fusion energy research.

Again, thank you for giving me the opportunity to testify before your Subcommittee today as we work together to promote economic growth for New Jersey.

WEDNESDAY, FEBRUARY 28, 1996.

NEW JERSEY PROJECTS

WITNESS

HON. BOB FRANKS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. FRELINGHUYSEN. Thank you Congressman Payne.

And batting cleanup, Congressman Bob Franks, who I think has a whole delegation out in the audience that he would like to recognize too.

I must say that the physical presence of Members of Congress from New Jersey here is very important. I sit here listening to Alabama and Mississippi and Louisiana. A lot of States do not physically send their Members here; and I know that Mr. Bevill would agree, your physical presence here, Republicans and Democrats standing together, does make a difference in the final analysis.

Mr. FRANKS. Mr. Chairman, if I may I would like to recognize the enormous contributions this committee has made to the welfare of the State of New Jersey, and I suspect that is what brings us all here.

Mr. Chairman, thank you for your continued leadership.

Mr. Bevill, you have always supported our projects, and we are very, very grateful for the ongoing support.

And, Mr. Chairman, your support of our projects and the role that your predecessor played on this subcommittee was of enormous import to the residents of New Jersey.

I would like to have my statement become a part of the record, and I would like to associate myself in the strongest possible terms with Mr. Zimmer's call for support by the committee of the Tokamak physics experiment at Princeton University.

Secondly, Mr. Chairman, I would like to ask, once again, that this Subcommittee continue the efforts my predecessor began on behalf of the Green Brook Flood Control Project. Members of the Green Brook Flood Control commission know how to get to this hearing room easier than I do, and they have all traveled down from New Jersey again, Mr. Chairman.

In conclusion, I ask that this committee continue its wonderful work in allowing the Army Corps to finally bring the Green Book Flood Control Project to fruition. We are entering a vital stage.

I would like to turn over whatever remaining time I have to a member of the commission.

[The statement of Mr. Franks follows:]

STATEMENT OF THE HON. BOB FRANKS
REGARDING THE FISCAL YEAR 1997
ENERGY AND WATER DEVELOPMENT APPROPRIATIONS BILL
FEBRUARY 28, 1996

Mr. Chairman, I appreciate the opportunity to appear before this Subcommittee in support of water resources and energy projects important to my home state of New Jersey and the nation. Specifically, I want to bring to my colleagues' attention my strong support for two important projects: the Green Brook Flood Control Project, which the Subcommittee is familiar with from past years, and the Tokamak Physics Experiment at Princeton University.

GREEN BROOK FLOOD CONTROL PROJECT

As my colleagues may recall, this project was authorized by Congress under the Water Resources Development Act of 1986 (P.L. 99-662, Sec. 401). During the past ten fiscal years, Congress has appropriated over $23 million for this project. In fiscal year 1986, Congress appropriated $484,000; in FY 1987, $1.37 million; FY88, $1.4 million; FY89, $1.5 million; FY90, $1.2 million; FY91, $2 million; FY92, $3.169 million; FY93, $3.5 million; FY94, $2.8 million, FY95, $2 million and FY96 $3.6 million. For fiscal year 1997, I respectfully request that the Subcommittee provide the sums recommended by the Army Corps of Engineers in their upcoming budget request, which has not yet been finalized.

Mr. Chairman, as the preliminary work for this project draws to a close, I requested that the Green Brook Flood Control Commission obtain resolutions of support from the communities this project impacts within New Jersey's 7th Congressional District. Considering a decade has elapsed since federal funds were first appropriated for this project, I wanted to make sure this project still enjoyed local support before it entered the more expensive construction phase. Moreover, these resolutions served the dual purpose of reminding local officials of the fiscal and physical impact this project will have on their community.

To date, I have received resolutions of support from Bound Brook, Bridgewater, Warren, Watchung, Green Brook, North Plainfield, Union County and Somerset County. I am still awaiting decisions from Plainfield, Scotch Plains, Fanwood, Middlesex, and South Plainfield. The only resolution I received in opposition to the project was from Berkeley Heights. I have asked the Commission and the Corps to work closely with the Berkeley Heights Township Committee to address and resolve, to the greatest extent possible, the concerns of the Township.

Mr. Chairman, while the need for flood control in the Green Brook Drainage Sub-basin still exists, I respectfully request that the Subcommittee include report language urging the Corps to proceed with this project in the most environmentally sensitive manner possible. I grew up along the "Ridge," which is the term used to describe the communities along the Watchung Mountains, and I am acutely aware of the innate value of the Watchung Reservation. As the Reservation is one of the largest green spaces left in my congressional district, I intend to zealously protect it from any unnecessary environmental degradation.

Mr. Chairman, my good friend and fellow New Jersey colleague, Mr. Frelinghuysen, with the able assistance of his legislative director, Ed Krenik, has been invaluable in his support of this project. I urge the Subcommittee to fully fund the Army Corps' funding request for this important project.

TOKAMAK PHYSICS EXPERIMENT/FUSION ENERGY

I would also like to express my strong support for the funds proposed for the Department of Energy's fusion energy program, and urge the Subcommittee to approve the President's budget request. As I am sure my colleagues will recall, it was a very proud day for all New Jerseyans when the world's record was set in fusion power production at the Princeton Plasma Physics Laboratory December 1993. The U.S. fusion program reached a major milestone and made scientific history when the Princeton tokamak produced more than six million watts of fusion power. For a few brief seconds, Lawrenceville, New Jersey, the site of the lab, was the hottest place in the solar system, even hotter than the core of the sun.

By May 1994, Princeton's experimental reactor had produced nine million watts, followed by still another world record of 10.7 million watts in November, 1994. These experiments used for the first time the fuel mixture likely to be used in a commercial power plant, moving the fusion program into a new era and moving the nation closer to practical fusion power.

The FY96 budget for fusion energy included $62 million in new construction funds for the Tokamak Physics Experiment, (TPX) an advance fusion machine that will have the capability to operate continuously. TPX will replace the existing tokamak at Princeton, using much of the hardware and scientific personnel already assembled there. I believe the TPX is crucial if we are ever to realize the full potential of fusion energy.

Mr. Chairman, New Jersey is the home to many great scientific firsts that have changed the world. These firsts include: the light bulb, the movie camera/projector, the transistor, the phonograph, the air conditioner, and the solar photovoltaic cell, to name but a few. With the support of this Subcommittee, practical commercial fusion energy will someday be added to that list. I urge my colleagues to support fusion energy research by fulling funding this worthy program.

Mr. Chairman, thank you for your consideration of my views. As I am sure the Subcommittee will again produce a fine piece of legislation this year, I look forward to supporting the Subcommittee's bill when it reaches the floor of the House.

Mr. FRELINGHUYSEN. I think the record should show that we have members of that commission here. Maybe at this point, though, if Mr. Knollenberg, the Chair, will yield, I will excuse the New Jersey delegation and thank you for being here each and every year. It does make a difference.

And, Mr. Franks, would you like to recognize anybody in particular? And if I absent myself, I am going to speak on behalf of the Urban Corps in another committee, Mr. Wolf's committee. So I want to thank Chairman Knollenberg for recognizing New Jersey Members of Congress.

[Statements of Hon. Robert Torricelli and Hon. Robert Menendez follow:]

ROBERT G. TORRICELLI
9TH DISTRICT NEW JERSEY

COMMITTEES
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RANKING MEMBER SUBCOMMITTEE ON WESTERN HEMISPHERE
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Congress of the United States
House of Representatives
Washington, DC 20515–3009

Testimony of Representative Robert G. Torricelli
Energy and Water Appropriations Subcommittee

February 28,1996

I would like to begin by thanking my colleague from New Jersey, Mr. Frelinghuysen for securing this time for us, and to thank you, Mr. Chairman for giving us this opportunity to let you know what our priorities are.

I would like to express my strongest support for funding for the fusion energy program. This is a program that we in the New Jersey delegation are very familiar with because of the outstanding work being done at the Princeton Plasma Physics Labratory. In addition to being the hottest place on earth, the lab is an example of New Jersey's excellence in science and technology, and I am sure my colleagues join me in support of the labs continued role as the national center of fusion energy science.

The fusion energy program, both nationally and in New Jersey, is leaner and smarter this year after last year's budget cut. The Princeton lab has had to downsize and reorganize, yet it continues to be on the forefront of fusion science and technology in this country.

Our request this year is not for construction authority, or for a large budget increase, but rather that the Subcommittee support the fusion program with the budget recommended by the fusion Energy Advisory Committee (FEAC) of $275 million. This represents a modest increase from last year when the program suffered the hard hit of a 33% reduction.

I would like to enter for the record a copy of a Congressional letter that was sent recently to the Administration in support of the fusion energy program. It is signed by 50 Members of the House, and is just one measure of how important this program is to our national science and technology enterprise.

I would also like to use this opportunity to ask that the subcommittee continue to earmark funding for the cleanup effort in Maywood. This has been a very successful effort thus far, with the removal of the 35,000 cubic-yard bulk of materials from

PRINTED ON RECYCLED PAPER

remediation scheduled to be completed during the first quarter of FY 1997. In addition, five vicinity properties have already been cleaned-up already in FY 1996, and 8 additional clean-ups are planned for the duration of FY 1996. If funding is available for FY 1997, the cleanup can continue and 8 more vicinity properties would be completed.

The FY 1997 appropriations process will no doubt be another contentious one, filled with difficult choices. I would hope, however, that you can see the importance of these two programs and the wisdom of funding them. Thank you.

Congreſs of the United States
House of Representatives
Washington, DC 20515

February 15, 1996

The Honorable Hazel O'Leary
Secretary of Energy
Forrestal Building
1000 Independence Ave SW
Washington, DC 20585

The Honorable John H. Gibbons
Assistant to the President for
Science and Technology
Office of Science and Technology Policy
Old Executive Office Building
17th St and Pennsylvania Ave NW
Washington, DC 20500

Dear Secretary O'Leary and Dr. Gibbons:

We are writing to express our support for a strong U.S. program in fusion energy science and technology. Specifically, we encourage the Administration to submit to Congress a recommendation of at least $275 million for the Department of Energy's fusion energy program in the Fiscal Year 1997 budget.

As you know, the Department of Energy's Fusion Advisory Committee (FEAC) has recently completed a re-examination of the fusion program. The FEAC finds that cuts in the FY 1996 fusion budget effectively end U.S. leadership in this field at a time when there is tremendous progress and opportunity in fusion energy research. The report recommends that, by restructuring the Department of Energy's fusion program and providing a modest increase over the FY 1996 level, we can maintain our research strengths and thereby ensure our nation's active participation in international fusion energy development.

The FEAC report sets three policy goals for restructuring the fusion energy program which we believe Congress will support. These goals are to advance plasma science in pursuit of national science and technology goals; to develop fusion science, technology and plasma containment innovations as the central theme of the domestic program; and to pursue energy science and technology as a partner in the international effort.

Although we are all painfully aware of the severe budgetary constraints facing our nation, we must work to ensure that the U.S. fusion program is not reduced too deeply at a time when the fusion programs of other nations are growing and progress in fusion science and technology is accelerating. The U.S. must maintain a vital and competitive presence in this most fundamental area of science and this most promising energy technology.

Finally, we want to be clear that it is not our intent that other basic energy and science programs at the Department of Energy be deprived of funding to ensure necessary funding for the fusion program. Perceived competition for funding between science programs can only hurt the strength of U.S. science and technology initiatives.

Thank you for your consideration. We look forward to the Administration's strong support of a restructured fusion energy sciences program.

Sincerely,

Roscoe G. Bartlett, MC

Tim Roemer
Tim Roemer, MC

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Dr. John Gibbons
Secretary Hazel O'Leary

Randy Duke Cunningham
Randy "Duke" Cunningham, MC

Brian P. Bilbray
Brian P. Bilbray, MC

Jim Chapman
Jim Chapman, MC

James Hayes
James A. Hayes, MC

Mike Doyle
Michael F. Doyle, MC

Robert G. Torricelli, MC

John Spratt
John M. Spratt, Jr., MC

Jim McDermott
Jim McDermott, MC

Rodney P Frelinghuysen
Rodney P. Frelinghuysen, MC

Ron Packard
Ron Packard, MC

Jerry Lewis
Jerry Lewis, MC

Duncan Hunter
Duncan Hunter, MC

Vern J. Ehlers
Vernon J. Ehlers, MC

Chris Smith
Christopher H. Smith, MC

Zach Wamp
Zach Wamp, MC

Frank Pallone Jr.
Frank Pallone, Jr., MC

Charlie Norwood
Charlie Norwood, MC

Jim Saxton
Jim Saxton, MC

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retary Hazel O'Leary

Connie Morella
Constance A. Morella, MC

Matthew G Martinez
Matthew G. Martinez, MC

Richard E Neal
Richard E. Neal, MC

Bill Martini
William J. Martini, MC

Rob E A
Robert E. Andrews, MC

Julian C Dixon
Julian C. Dixon, MC

Marge Roukema
Marge Roukema, MC

Robert T. Matsui
Robert T. Matsui, MC

Steny H. Hoyer, MC

Joe Kennedy
Joseph P. Kennedy II, MC

Joe Moakley
John Joseph Moakley, MC

Sherry Boehlert
Sherwood L. Boehlert, MC

CC: Alice Rivlin, Director, Office of Management and Budget
Leon Panetta, Chief of Staff, President of the United States

TESTIMONY OF HON. ROBERT MENENDEZ
BEFORE
THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

Mr. Chairman, I come here today to reiterate my support for the programs requested in this year's budget by the U.S. Army Corps of Engineers for federal navigation projects in New Jersey. The testimony of the Port Authority of New York and New Jersey elaborates on the details of these projects, in the interest of brevity, I will only highlight a variety of dredging projects at the New York Harbor and adjacent channels. In the area of construction projects:

Kill van Kull - Newark Bay Deepening
Port Jersey Channel
The collection and removal of drift

Studies include:

Claremont Channel
Arthur Kill Channel
Perth Amboy Anchorage

These projects will widen, deepen and realign the channel to improve navigational safety and allow larger vessels. These projects are vitally important to the commerce of the region. At a time when foreign commerce is integral to the expansion of our economy, it is vital that we keep the Port of New York and New Jersey open.

Mr. Chairman, I must also take this opportunity to express my concern about the crisis in our nation's ports. This Subcommittee has championed the commercial use and preservation of our nation's navigable waters. I support taking measures to expand the federal role in the responsibility for dredged material disposal facilities, speed the process for siting confined disposal facilities, foster sediment decontamination technology and pollution reduction measures, which I hope this committee will fund.

I also wish to join my colleague Mr. Payne in expressing our support for Joseph Minish Park which is an important corollary to the Passiac River project.

Mr. Chairman, projects to maintain and improve our ports and harbors are taking far too long and are becoming bottlenecks to the expansion of our foreign commerce. A number of my colleagues are offering a proposal with regard to the management of dredged material from the New York/New Jersey Harbor. I would like to express my support but counsel caution with regard to some of these proposals which are neither prudent fiscally nor necessary environmentally.

The Governor of New Jersey has recently proposed a massive borrow pit in Newark Bay to end the disposal of category two dredged material in the ocean. This costly project is predicated on the unwarranted assumption that a state governor has the authority to regulate interstate commerce. I think that we must proceed with great caution in any delegation to states which impedes navigation because this would erode a fundamental underpinning of the Constitution which is to promote the uniformity of trade and travel between the states.

In addition to the fundamental policy concerns, there are fiscal issues which are troubling. The borrow pit proposed for Newark Bay is estimated to cost $120 million. As a part of the Governor's Dredged Material Management Team plan, the state of New Jersey is considering using Clean Water State Revolving Funds for this borrow pit rather than modernizing sewage treatment plants. I do not accuse any of my colleagues or Governor Whitman of bad faith. I think, rather, it is misplaced good intention at a time when we can ill afford these low priority items.

Further evidence of the low priority of these concerns was revealed on January 27, 1995, in a study by the National Marine Fisheries Service of NOAA entitled Chemical Contaminant Levels in the Flesh of Four Species of Recreational Fish from the New York Bight Apex which found:

> Concentrations of nine trace metals in each species were low and within the range of values found in uncontaminated finfish muscle. In all composites, levels of total mercury(including methyl mercury) were less than 0.11 ppm which is an order of magnitude below the FDA Action Level of 1.0 ppm for methyl mercury in seafood.
>
> Concentrations of PCBs and pesticides were relatively low and related to the lipid content of the tissue. The sum of the 25 PCB congeners measured in this study had a maximum value of 0.57 ppm in a bluefish composite compared with an FDA Action Level of 2.0 ppm. . . . With few exceptions, PAHs were largely not detected.
>
> Analyses of 17 dioxin and debenzofuran congeners were too unreliable to allow interpretation.

After a century of disposal at this ocean site, there appears to be very little environmental impact. I submit that there are genuine environmental problems that require the expenditure of our scarce resources. The $120 million borrow pit proposal for dredged material is not one of those priority environmental concerns.

Ports have a special place in the Constitution. When we consider the paramount emphasis that the Founding Fathers gave to the maintenance of federal navigation, we should arrange our priorities accordingly. If this is to be a time of shrinking budgets and scarce resources, then navigation projects should demand priorities over beach erosion and even minor flood control projects.

Even the most non-controversial dredging projects have run aground because Congress has failed to address the issues of navigation and waterborne commerce. The case of **US Shoe v. US** is a classic example of the problems ignored coming home to roost. A three judge panel struck down the Harbor Maintenance Tax as unconstitutional because it violates Article 1, Section 9, Clause 5 prohibiting taxation on exports. Since there have been surpluses of nearly $300 million in this trust funds at times it is not difficult to predict that the accruing of surpluses may constitute a violation of GATT as a non-tariff trade barrier to imports. How will Congress replace the Harbor Tax? Where will we get the revenues for a possible repayment of past Harbor Tax assessments? Congress must pay close attention to rectifying these problems or our economy will decline into economic isolationism.

The Harbor Tax must be replaced with a fee that will cover the cost of maintaining the federal channels, fairly apportion those costs and avoid the constitutional proscriptions. An alternative option is to reduce the cost of dredging. In New York Harbor, the cost of a dredging project has risen by a factor of twenty with no discernible improvement in environmental protection. Streamlining the process will reduce the cost of both federal navigation projects and private sector initiatives. Reducing the administrative overhead will not only reduce overall costs but ease the match requirements of the port communities. This can be done without endangering environmental safeguards.

In closing on the issue of dredging, the Congress should avoid validating unwarranted bias against dredging and ocean disposal. The current delays inherent within the permit process already provide a needless deterrent to frivolous dredging or port expansion. Further punitive measures will harm the viability of the Port of New York and New Jersey. If the port is not allowed to maintain itself in an economical manner, it will force cargo diversion to other ports outside of the United States, which do no have restrictions on expansion. Unless we proceed with caution, we will institutionalize permanent disabilities on the all harbor operations. There is also no reason to believe these restrictions will have any positive benefit for the environment. The adverse economic consequences of handicapping trade in an age of increasing global and inter-American integration could be catastrophic.

In another issue of great concern to the people of New Jersey and ultimately to the energy future of the nation is the future of the fusion energy program. Faced with a 33% cut in funding in FY96, the Department of Energy's fusion program is undergoing a dramatic transition. The Congress directed DOE to review the fusion program in light of the cuts and this review was completed by the Fusion Energy Advisory committee (FEAC) in January 1996. FEAC has recommended $275 million in FY97 and a restructured fusion program assuming a constant level over the next several years. I differ with many of the recommendations of FEAC. I do not think that international cooperation in fusion will replace a robust investment by and in the US. I do not think priceless scientific resources like the Princeton Fusion Tokamak Reactor, the most powerful and advanced device should be thrown away after merely two additional years of operation. I do agree that funding for this program should be stable and I hope that the Subcommittee will resist further cuts.

Thank you for the opportunity to provide these comments.

WEDNESDAY, FEBRUARY 28, 1996.

NEW JERSEY PROJECTS

WITNESS

VERNON A. NOBLE, CHAIRMAN, GREEN BROOK FLOOD CONTROL COMMISSION, FOMER SURROGATE JUDGE OF SOMERSET COUNTY, NEW JERSEY

Mr. FRANKS. Mr. Chairman, thank you very, very much. I appreciate this departure from the normal order of the committee, but these folks who have been the bulwark of the effort to protect the lives and the property of tens of thousands of people in central New Jersey, who for the last 20 years have made it one of the most important causes, not only for them, but have shared their concerns with their neighbors and governments at local, county, State and Federal levels.

I would like to, if I can introduce the Chairman of the Green Brook Flood Control Commission, the Honorable Vernon Noble of Somerset County.

Mr. NOBLE. Thank you, Congressman Franks.

Good morning, Mr. Chairman and the members of the committee.

We have turned over our testimony to the staff, and I am just going to go take a few minutes for a little history lesson to bring everyone up to date as to where we are.

Back in 1931, in central Jersey in the Green Brook Sub-Basin, the mayors formed a flood committee because they were having terrible floods; but at that time most of them were farmers. Now things have changed considerably and we are now very rapidly running out of farmland, being replaced by homes, businesses, schools, et cetera.

The commission was created in 1972. We soon found out when we tried to rejuvenate the mayor's committee that we were really not recognized as a legal body, so we went to our State legislature, and that is when we became a commission. We are all volunteers on the commission.

At this time, I would like to introduce the members that came down with me. On my immediate right is Frank Meeks, who is our Treasurer; Larry Newcomb from Scotch Plains, who is my Vice Chairman; and Joe Debler, who is a member of our Legislative Committee.

It is bad getting up at 4 o'clock in the morning to come down here by 9.

Things have changed over a period of years. There have been a lot more requirements. But we have gone through them and met all of those requirements that were necessary—Indian artifacts, historical studies, hazardous wastes, wetlands, endangered species.

In 1986, we were authorized by Congress as a project to be authorized for preconstruction and engineering and also yearly budgets from the Army Corps of Engineers. And that is why we are down here today, to support the Army Corps of the Newark District to further their work and complete the preconstruction engineering in the 1997 budget.

All of the towns within the Green Brook Sub-Basin, there are thirteen and there are three counties, have always supported the

Green Brook Flood Control Commission. There is one thing I have never allowed, and it seems that no one else wants to replace me as Chairman. Maybe they don't like to come to Washington, or maybe they notice that I had a head of hair when I first started and now I am at the other end of the spectrum.

But we never allowed political politics to become involved in it. We worked as interested, knowledgeable people that wanted to do something for people in the Green Brook Sub-Basin. I have worked with Democrats, I have worked with Republicans, I have worked with Independents, and we have been very, very successful.

I know it is hard times in the Federal Government. We stand a chance that the Federal portion will be reduced further than what it is now, but we still have the support of the counties and the people and the municipalities.

The State of New Jersey, through the DEP, has supported this project because we have been continuous in all of the years. We have regular meetings. We have a legislative brunch once a year where we can bring our legislators up to date as to where we are. The State of New Jersey has already programmed money in the 1998 budget for the continuation of the project, and we expect that by no later than May of 1998 the shovel will be put in the ground.

I would just like to reiterate that we are all volunteers and some of us have been on it since its inception, 25 years. I appreciate the opportunity to bring that little history class here to Washington today, but I think it is very important that they know we are dedicated and we do need it very, very much.

If I may, Mr. Chairman, I would just like to say to a gentleman I have known through the years, Tom Bevill, I was kind of disappointed when I read that you were not going to run for reelection. But I would like to thank you for all of the support you have given us over the years, and I wish you many happy days in your retirement, and that you are able to do everything you think you are going to do after you retire, because that is one lesson I found out, you do not accomplish all of those things.

[The statement of Mr. Noble follows:]

Green Brook Flood Control Commission

VERNON A. NOBLE, CHAIRMAN

111 GREENBROOK ROAD
GREEN BROOK, NEW JERSEY 08812
908-968-2018

I.B.110/I.B.130/I.B.130.1

TESTIMONY

OF

THE HON. VERNON A. NOBLE
Chairman
GREEN BROOK FLOOD CONTROL COMMISSION

CONCERNING APPROPRIATIONS FOR

THE GREEN BROOK FLOOD CONTROL PROJECT
(New Jersey - Raritan River Basin - Green Brook Sub-Basin Project)

BEFORE THE

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
OF THE HOUSE OF REPRESENTATIVES COMMITTEE ON APPROPRIATIONS
The Hon. John Meyers, Chairman
on
WEDNESDAY, FEBRUARY 28, 1996

IN ROOM 2362
RAYBURN HOUSE OFFICE BUILDING

SUMMARY

The Commission requests that the Congress appropriate $3,000,000 for the Project in FY 1997, to prepare for construction of the Project at the earliest possible time.

Green Brook Flood Control Commission

VERNON A. NOBLE, CHAIRMAN

111 GREENBROOK ROAD
GREEN BROOK, NEW JERSEY 08812
908-968-2018

Mr. Chairman and Members of the Subcommittee:

My name is Vernon A. Noble, and I am the Chairman of the Green Brook Flood Control Commission. I am here before you today in support of the Raritan River Basin - Green Brook Sub-Basin project, which we request be budgeted in FY 1997 for $3,000,000 for preconstruction engineering and design funds.

The Commission was established in 1971, pursuant to an Act of the New Jersey Legislature, following disastrous flooding which took place in the Green Brook Basin in the late Summer of 1971. That flood caused $72,000,000 in damages and disrupted the lives of thousands of persons.

In the late Summer of 1973, another very severe storm struck the area, and once again thousands of persons were displaced from their homes. $75,000,000 damage was done and six persons lost their lives.

Thanks to the efforts of New Jersey's Representatives and Senators in Congress, the Corps of Engineers was authorized by Congress in 1986 to design a solution to this problem of flooding. The floods of 1971 and 1973 were only the most recent in a long series of severe floods. Flooding in this Sub-Basin dates back to the late 1800's when they were first recorded, and has become more damaging as the population of the area has grown.

The Green Brook Flood Control Commission is made up of appointed representatives from Middlesex, Somerset and Union Counties in New Jersey, and from the 13 municipalities within the Basin. This represents a combined population of almost one-quarter of a million (248,084) people.

The Members of the Commission are all volunteers, and for 25 years have served, without pay, to advance the cause of flood protection for the Basin. Throughout this time, the Corps of Engineers, New York District, has kept us informed of the progress of the project, and a representative from the Corps has been a regular part of our monthly public meetings.

Thanks to the vigorous support of New Jersey's Congressional Delegation, the Congress in 1986 authorized a comprehensive flood control project for the protection of the entire Green Brook Basin at a then established estimated cost, in 1985 dollars, of $203,000.000

In 1987, Congress adopted Legislation which included a provision making it clear to the Corps of Engineers that protection is to be designed for the entire Green Brook Basin, rather than only the lower portion of the Basin, as had one time been studied by the Corps of Engineers.

We believe that it is essential that the Green Brook Flood Control Project be carried forward, and pursued vigorously to achieve protection at the earliest possible date. This project is needed to prevent loss of life and property, as well as the trauma caused every time there is a heavy storm. We urgently request an appropriation for the project in FY 1997 of $3,000,000.

New Jersey has strongly reaffirmed its support for the project to provide full protection for all of the people of the Basin. In January 1992, the New Jersey Legislature passed a Bill, which was signed by the Governor, establishing a program to plan for the non-Federal share for this and other water resources related projects. New Jersey has programmed budget money for its share of the project for FY 1997.

The more quickly the design of this project is completed, the less will be the total cost, and the sooner the project can go to construction.

Economics and costs are of course important, but personal human tragedy, and the loss of life, is more important.

We note that during the past 12 months the work of the New York District of the Corps of Engineers has continued to accelerate, and we are gratified with this progress. Nevertheless, the progress, we believe, can and should be further accelerated.

As the project progresses towards the start of construction in FY98, plans for protection and presentation of wetlands are being refined.

The Corps of Engineers and the New Jersey Department of Environmental Protection are using the special knowledge of the U.S. Fish and Wildlife Service to help in developing plans to reclaim old natural wetlands, now sadly degraded as a result of old industrial operations. Such degraded, and in some cases, entirely unproductive natural former wetlands, exist in a number of places in the Green Brook Basin, particularly in the Dismal Swamp in Edison and South Plainfield, as well as along the Bound Brook in South Plainfield and Piscataway.

The plans now being fine-tuned contemplate a restoration of the best candidate sites in these former wetlands so that their value as wildlife habitat will be made approximately one and one half times as valuable as the wetlands along other portions of the waterways which will necessarily be impacted by the need for protective levees to keep floodwaters out of people's houses.

We urgently request that the Congress provide an appropriation of $3,000,000 for the Green Brook Flood Control Project in FY 1997.

Thank you, Mr. Chairman, and Members of the Subcommittee, for the opportunity to present this testimony to you today.

Vernon A. Noble

Vernon A. Noble, Chairman

testimony.gbfc

GREEN BROOK FLOOD CONTROL

GREEN BROOK SUB-BASIN, RARITAN RIVER BASIN, NEW JERSEY

GREEN BROOK FLOOD CONTROL PROJECT FUNDING

FEDERAL FISCAL YEAR	FEDERAL ADMINISTRATION BUDGET REQUEST	CONGRESSIONAL APPROPRIATION (NOMINAL)	SAVINGS AND SLIPPAGES	EFFECTIVE NET APPROPRIATION TO CORPS OF ENGINEERS	TRANSFER BY CORPS TO (-) FROM (+) OTHER PROJECTS	NET MONEY AVAILABLE FOR WORK ON PROJECT (WORK ALLOWANCE)
1986	$ 445,000	$ 445,000	$ -19,000	$ 426,000	$ - - -	$ 426,000
1987	1,370,000	1,370,000	- - -	1,370,000	- - -	1,370,000
1988	1,400,000	1,400,000	- - -	1,400,000	- - -	1,400,000
1989	1,500,000	1,500,000	-68,000	1,432,000	- - -	1,432,000
1990	1,200,000	1,200,000	-73,000	1,127,000	-20,000	1,107,000
1991	2,000,000	2,000,000	-496,000	1,504,000	-98,000	1,406,000
1992	2,600,000	3,169,000	-364,000	2,805,000	- - -	2,805,000
1993	- - -	3,500,000	- - -	3,500,000	- - -	3,500,000
1994	- - -	2,800,000	-594,000	2,206,000	- - -	2,206,000
1995	2,000,000	2,000,000	- - -	2,000,000	+135,000	2,135,000
1996	3,600,000	3,600,000	-932,000	2,668,000	+193,000	2,861,000
1997	- - -	3,000,000	RECOMMENDATION OF THE GREEN BROOK FLOOD CONTROL COMMISSION FOR FY1997 TO OPTIMIZE PROGRESS FOR EARLY COMPLETION			

REFERENCE:
THIS SUMMARY OF FUNDING FOR THE GREEN BROOK FLOOD CONTROL PROJECT HAS BEEN ASSEMBLED BASED UPON PUBLICLY AVAILABLE INFORMATION.

PRESENTED BY:
GREEN BROOK FLOOD CONTROL COMMISSION
GREEN BROOK, NEW JERSEY 08812

Green Brook Flood Control Commission

VERNON A. NOBLE
CHAIRMAN

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GREEN BROOK, NEW JERSEY 08812
(908) 968-2018

I.B.110/I.B.130/I.B.130.1

LIST OF WITNESSES

APPEARING ON BEHALF OF THE
GREEN BROOK FLOOD CONTROL COMMISSION

Concerning Appropriations for
THE GREEN BROOK FLOOD CONTROL PROJECT
(New Jersey - Raritan River Basin - Green Brook Sub-Basin Project)

Before the
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
OF THE HOUSE OF REPRESENTATIVES COMMITTEE ON APPROPRIATIONS

U.S. HOUSE OF REPRESENTATIVES

ON WENESDAY, FEBRUARY 28, 1996
in Room 2362
of the Rayburn House Office Building

WITNESS LIST

The Hon. Vernon A. Noble, Chairman, Green Brook Flood Control Commission and former Surrogate Judge of Somerset County, Green Brook, New Jersey

The Hon. B. Lawrence Newcomb, Vice Chairman, Green Brook Flood Control Commission, and former Mayor of Scotch Plains, New Jersey

The Hon. Francis J. McArdle, Chairman of the Legislative Committee of the Green Brook Flood Control Commission and former Mayor of North Plainfield Borough, North Plainfield, New Jersey

The Hon. Francis M. Meeks III, Treasurer, Green Brook Flood Control Commission and former Member of the City Council of Plainfield, Plainfield, New Jersey, and presently Commissioner of the Union County Board of Taxation, Plainfield, New Jersey

Mr. Joseph J. Debler, Commissioner, Green Brook Flood Control Commission, Retired Environmental Biologist, Former Member of the Piscataway Environmental Adivsory Commission, and Representative from the Township of Piscataway

J.B. Wiley, Jr., P.E., P.P., Planning Consultant to the Green Brook Flood Control Commission, Far Hills, New Jersey

Mr. BEVILL. I appreciate you all. I have observed you; you have really worked great together and it has just been a pleasure to work with you.

I was sitting here thinking about the Barnegat Inlet. We used to hear so much testimony on that. I remember, I guess it was Bob Rowe that would always give the number of people killed in that. It was a terrible situation there, and it took years really to get it resolved; but apparently we did get it resolved, because I don't hear any more of it.

But you have been great to work with, and I appreciate the good work that you all do, and I have enjoyed working with you. I am sure we have got some good, capable folks here, like the Chairman that is going to carry on, and like Rodney, that will be carrying on here. So thank you for your comments.

Mr. NOBLE. It is my pleasure.

Mr. KNOLLENBERG. Again, I recognize that you may not have been aware of the time factor here. We like to give Members plenty of opportunity to say their piece and they have; but believe me, we do appreciate your testimony, we appreciate your being here, and aside from the 4 o'clock wakeup call that you got, Mr. Noble, I hope that eases up this afternoon. Thank you for being here.

WEDNESDAY, FEBRUARY 28, 1996.

FLORIDA PROJECTS

WITNESS

HON. C.W. BILL YOUNG, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. KNOLLENBERG. We will move into the second phase.

At this time I would like to recognize Mr. Bill Young, the distinguished Chairman of the Defense Appropriations Committee, who I believe is acting in a leadership capacity for the Florida delegation.

So, Mr. Young, I yield to you and we have, I believe, an hour allocated for the commentary that you and your Members would like to offer. So I recognize you to begin the process.

Mr. YOUNG. Mr. Chairman, thank you very much. We appreciate this opportunity. We will try to expedite and not use the hour, because everyone is fairly busy this morning.

First, I would like to say that many of the Florida projects that you will hear requested today have to do with beach renourishment. And I wanted to remind the committee that last year when the administration decided they would no longer participate in beach renourishment programs, this delegation became quite concerned, and we communicated that concern to the members of this subcommittee, Mr. Bevill, Mr. Myers, and you responded in a very positive way, and you continued to fund those projects. And I wanted to thank you very much for that.

I will briefly submit a statement for Corrine Brown, who is not able to be here, and I have given a number of copies to the staff. If you have no objection, we will do that because she will not be able to be present.

[The statement of Ms. Brown follows:]

COMMITTEES:

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ongressional Black Caucus
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Congressional Space Caucus
Older Americans Caucus

Congress of the United States
House of Representatives
Washington, DC 20515

CORRINE BROWN
3D DISTRICT, FLORIDA

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STATEMENT

THE HONORABLE CORRINE BROWN (FL)

BEFORE THE

HOUSE APPROPRIATIONS SUBCOMMITTEE ON ENERGY AND WATER

FEBRUARY 29, 1996

Chairman Myers, Congressman Bevill, and Members of the Subcommittee:

I am pleased to appear before you today on behalf of the Jacksonville Port Authority which operates the Jacksonville Harbor.

Before I discuss the Jacksonville Port Authority's appropriations request, I think that it would be helpful for the Subcommittee to have some background information about the Jacksonville Harbor. Jacksonville's Harbor is formed by the St. Johns River. It constitutes a Federally maintained channel that is 26.1 miles long from the entrance of the buoy in the Atlantic Ocean to the Matthews Bridge in downtown Jacksonville. The majority of the harbor (20.1 miles) has a project depth of -38 feet while 2.9 miles of the entrance channel is authorized at -42 feet and the remaining 3.1 miles near the Matthews Bridge is -34 feet.

PRINTED ON RECYCLED PAPER

The Jacksonville Harbor is currently involved in a Feasibility Study through a Joint Participation Agreement with the Jacksonville Port Authority and the U.S. Army Corps of Engineers. The study will determine the feasibility of deepening the authorized channel to a maximum of -44 feet. The study is over 50% complete and a final report will be published in 1998.

I am here today to request that $7 million for the Corps of Engineers' maintenance of the Jacksonville Harbor be specifically included in the Fiscal Year 1997 Energy and Water Appropriations Bill. Let me explain why these funds are urgently needed.

The St. Johns River has been experiencing increased shoaling rates that have seriously impacted the draft of the vessels passing through the harbor. The river shoals seem to occur in predictable locations and build up rapidly after a major dredge event. The Jacksonville Port Authority has had several meetings where they have solicited the help of the Corps of Engineers to determine the cause of the increase in shoaling rate but so far, no root cause has been identified. The Corps has no funding to pursue this subject, so they have been unable to help the Jacksonville Port Authority address this serious situation.

As a result, the Jacksonville Harbor is experiencing restricted use. As these shoals continue to build, safety demands that the draft of the vessels entering the harbor of Jacksonville be reduced.

This continued reduction of draft (and therefore vessel tonnage) is seriously impacting the commerce of the City of Jacksonville. Less product being carried in the ships results in more ship calls, and thus higher operating costs to both the shipping companies and the businesses that rely on this waterborne commerce. Continued restrictions may encourage these companies to look elsewhere to do their business.

The Corps of Engineers must schedule more frequent dredging of the Jacksonville Harbor, and special attention must be given to particular zones of the channel that shoal almost immediately following a dredge event. The Corps of Engineers cannot maintain project depth, they simply state that they do not have the funds to properly maintain the Jacksonville Harbor. In order for the Corps of Engineers to maintain the federal channel depth, it is mandatory that the time interval between dredging events be shortened. The current funding available for the maintenance of the Jacksonville Harbor is less than half the amount needed. The annual appropriation level for the Corps of Engineers' maintenance of the Jacksonville Harbor needs an immediate increase from less than $3 million to $7 million dollars in order to keep this harbor open and safe for ship traffic.

Thank you for your consideration.

Mr. YOUNG. And then let me begin and say that my request for the 10th Congressional District is relatively small as normal, but it basically is beach renourishment. The budget request is not quite enough to maintain the projects that we have ongoing there, and in my written statement, which I will submit, we ask that you increase that slightly.

In addition, we have the Department of Energy conversion project that is under way there, and has had a very positive economic impact on Pinellas County. We would like your continued support for that.

And with that, Mr. Chairman, I will just submit my written statement and save that time.

[The statement of Mr. Young follows:]

Testimony of U.S. Rep. C. W. Bill Young Before the House Appropriations Subcommittee on Energy and Water Development
February 28, 1996

Mr. Chairman, As Chairman of the Florida delegation, I want to thank you for inviting our members to your Committee this morning to present Florida's Fiscal Year 1997 public works appropriations requests. The Committee's interest and support for our state's important and varied needs is very much appreciated by our delegation and the people of Florida we represent.

As always, Mr. Chairman, because I appreciate and understand the time constraints of your Committee, I am pleased to submit a brief statement about the projects for the 10th Congressional District I have the privilege to represent.

Once again, I want to thank you for your Committee's continuing support of the ongoing beach restoration and nourishment program in Pinellas County, Florida. Because of the investment we have made in this project, the damage associated with the unusually large number of major storms that hit Florida and the Gulf Coast region I represent were minimized again this past year.

It is a pleasure to report that with the $3 million you added to the Corps of Engineers budget at my request last year, the Jacksonville District Office will complete the design and engineering memorandums for a major renourishment of Sand Key, the longest segment of Pinellas County's beaches.

The Corps of Engineers in Jacksonville has performed above and beyond the call of duty in this regard as they have expedited the design phase of this project to have it in position for construction to begin next January. It is my understanding that the President's budget will include a request of $5.8 million for this project. Because the President's budget was developed prior to the completion of the construction documents, the final cost of the project has increased slightly and I would request that we include $8.0 million in the 1997 bill for Pinellas County beach renourishment.

This will bring into the project two important sections of Pinellas County's beaches that have long been authorized but for which local sponsorship has been lacking. As a result, these areas of Pinellas County will experience a new measure of protection from heavy storms and high tides that have left many of these properties damaged by storm after storm over the past few years.

These funds will also enable the Corps to renourish several areas of projects completed in prior years but which were subject the unusually high tidal and wave action due to storms. Finally, this request will allow the Corps to complete design memorandums for the renourishment of beaches at Treasure Island and Upham Beach, two other vitally important projects in Pinellas County. Funds will be required in Fiscal Year 1998 for the construction of these projects.

As you know, these projects are not only a matter of public safety in the area of Florida I represent, as they provide a buffer between the Gulf and public and private property along the coastline, they are also a major economic attraction for the thousands of tourists who visit Pinellas County each year to enjoy our wide, beautiful beaches. The economic impact of these visitors is considerable in Pinellas County and the State of Florida.

Mr. Chairman, I want to commend you and the members of your Committee for recognizing the value of these beach renourishment projects and for repudiating the Administration's 1996 budget recommendation that the Corps no longer participate in these projects. This was a dangerous proposal that would have jeopardized the future of beach restoration programs throughout our state and our nation.

As you know, the Corps has a wealth of engineering, contracting, and construction knowledge and experience that ensures quality projects that are also cost-effective. That is evident in the work they have done in Pinellas County. Eliminating the Corps' participation in these projects would leave a void which individual state and local governments would have to fill by hiring their own engineering teams. This would be a costly and redundant expense and would require years to build the same institutional knowledge currently held by the Corps.

Although we have not had the benefit of seeing the President's 1997 budget request which is not due to be received by Congress until mid-March, I would urge you to stand firm once again this year if it includes a similar proposal to eliminate Corps participation in beach restoration projects.

This, Mr. Chairman, is the only public works request I would make of your Committee today, and I would appreciate whatever consideration you can give.

The second subject I want to discuss with you this morning, is the Department of Energy's ongoing downsizing and the reorganization of its defense weapons activities. In particular, I want to thank you and the members of your Committee for your support over the past four years of my efforts to see through to a successful conclusion the conversion of the Department of Energy's Pinellas Plant from its national security to its new found commercial mission. With the Department's strong support, our community has retained the tremendous technology base available there for conversion to a very successful commercial facility which will retain jobs and lead to great employment gains down the road.

This project has become a model for other Department of Energy and Department of Defense projects around our nation undergoing similar conversions. The commercial mission at Pinellas will utilize the advanced technologies and significant investment our nation has made in this facility over the past 40 years by focusing their future use on the development of new commercial products and lines of production that will create jobs and enhance our nation's technological base and capabilities.

Secretary O'Leary and her Department recognize that there is a way to convert these facilities from a defense to a commercial use in a smooth, economical manner. The Secretary has supported this project with funds from her limited budget, and I thank her for that.

It is my hope that in reviewing the Department's 1997 request for defense programs, environmental restoration, and technology transfer initiatives that you will keep in mind the needs of facilities such as the Pinellas Plant as they proceed through the difficult, initial stages of the conversion process. The small investment we make in this project now will provide a great return to our nation and communities such as Pinellas County in the out years.

In closing, Mr. Chairman, thank you and the members of your Committee for your support and interest in these matters.

WEDNESDAY, FEBRUARY 28, 1996.

FLORIDA PROJECTS

WITNESS

HON. E. CLAY SHAW, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. YOUNG. I would now like to introduce in order of seniority those Members that are here: first Mr. Clay Shaw, who is one of the senior Members of our delegation, and he has a lengthy statement which he will summarize and submit in writing.

Mr. SHAW. Yes, sir, I will. I will be very brief. But I have several projects that are enumerated in my written statement, which will be made available to you, which are of great significance.

I would like to just point out that my district is 91 miles of coastline, which is the thin strip of coastline coming from Jupiter in Palm Beach County on the north, coming down through Palm Beach, Fort Lauderdale and ending at the southern part of Miami Beach. So it might seem like I am asking for a lot, but there are many congressional seats that are adjoining mine that depend very heavily.

I just want to echo and really underscore the question of funding projects that are of significance, national significance. I don't know of anything really from an economic standpoint that is of more national significance than beach renourishment. The travel and tourism industry contributed $746 billion to the United States gross domestic product in 1995. That is over 10 percent of the GDP. And also produces $47 billion in tax revenues and employs 14.4 million people, making it America's largest employer.

My area is totally dependent upon the beaches and beach renourishment. It has gotten to be a terrible problem. It is one where I would hope that we would look to some type of grants to do some experimentation as to trying to find some substitutes. I know this committee has been involved in that in the past.

We do need substitutes for dredging. However, at this time, dredging is absolutely necessary. It is a Federal responsibility; it should continue to be a Federal responsibility. Most of the erosion that you have found has been caused by inlets that have been put into the ports all along the coastal areas of the United States. I know the New Jersey people talked to you about it, and I would guess that all of the coastal Members of Congress are very concerned about that.

And with that, I do have a written statement that I will submit for the record.

Mr. KNOLLENBERG. It will be accepted as indicated as produced.

[The statement of Mr. Shaw follows:]

Statement of the Honorable E. Clay Shaw, Jr.
before the
Energy and Water Development Subcommittee
February 28, 1995

Mr. Chairman, I appreciate the opportunity to join my colleagues from Florida in supporting funding for energy and water projects which are important to our state. I would like to thank Chairman Myers and Ranking Member Bevill for this chance to submit my testimony.

My written testimony includes requests for funding for projects in Florida. I would, however, like to focus my statement on a recent problem in which districts such as mine find themselves. As you know, the Administration has proposed that it will allow the Army Corps of Engineers to play a role in only those water projects and programs that are of "national significance." If the President succeeds there will no longer be federal funds available for local flood control and shore protection projects. The loss of the sand on our beaches would result in both a devastating environmental and economic loss to Florida and all other coastal states.

Beach nourishment has traditionally been regarded by policymakers as a recreational and environmental function. But in recent years there has been a dramatic change in the real reason for renourishment programs in coastal communities throughout our country in recent years. The 91 miles of coastline that I represent is absolutely and purely dependent on the beach renourishment program for economic and industrial reasons. Should the federal policy to fund renourishment projects end abruptly and without warning, the economic health of my congressional district indeed would be devastated. Literally thousands of jobs could be lost.

Traditionally, federal and local governments have worked together to protect our nation's shores. This bond has worked to save the integrity of our beaches and produce a tremendous travel and tourism industry which contributed $746 billion to U.S. Gross Domestic Product in 1995. That's over 10% of total GDP. Travel and Tourism also produces $47 billion in annual tax revenues and employs 14.4 million people, making it America's largest employer.

I know that beach nourishment projects are viewed by some in Congress as a costly and unnecessary expenditure. But if the policy is to change, I strongly urge my colleagues to at least continue funding at gradually lower levels to give the states and local sponsors time to develop alternative funding mechanisms. In addition, I hope you will consider encouraging and funding demonstration projects to explore alternative renourishment methods.

I would like to thank the subcommittee for "strongly rejecting" the Administration's proposal with the language that it inserted in the Fiscal Year 1995 Energy and Water Appropriations conference report and would encourage the subcommittee to maintain this position.

On a more specific note, beach erosion has reached critical proportions in my district, which includes Palm Beach, Broward and Dade counties. Sand and surf were South Florida's original tourist attractions. But along much of the southeastern coast, the surf has become the enemy of the sand. The pounding waves are washing more sand away than they are bringing ashore. Continued beach renourishment projects are imperative to keep sand on the following areas that are experiencing withering beaches.

Ocean Ridge, Palm Beach County

This proposed project will place sand fill and construct several groins and breakwaters along approximately 1.5 miles of beach south of South Lake Worth Inlet. This area of beach has experienced severe erosion, threatening upland properties and State Road A1A. Existing erosion control structures and an inoperable sand bypassing plant at South Lake Worth Inlet have been insufficient to sustain a functionable beach. The renourished beach will provide storm protection and improve recreational opportunities. This project is included in the overall Palm Beach County Renourishment program and is authorized for local construction with reimbursement by the federal government.

$200,000 was included in the final Fiscal Year 1994 Energy and Water appropriations conference report for the initial design by the Army Corps of Engineers. However, $4,120,020 is needed to construct this project.

Boca Raton Beach Renourishment , Palm Beach County

The funding needed for this project is for the preconstruction, engineering, and design work to renourish a 1.5 mile stretch of beach fronting the City of Boca Raton in southern Palm Beach County. The proposed area for renourishment was initially renourished in 1988. Shoreline in the area is subject to severe erosion, and public recreation facilities have been damaged by prior storm events. The renourished beach will provide enhanced storm protection for public parks and roads and other upland improvements along the beachfront.

I testified before the subcommittee on this particular project in 1993 and 1994. However, no funding was appropriated. Therefore, I am requesting $2,482,700 for this much needed project.

Dade County Reuse Facility

Last year Congress authorized a survey to determine the feasibility of a regional wastewater reuse facility in Dade County, Florida. The FY '96 Energy and Water Development Appropriations Act included language which enabled the Army Corps of Engineers to proceed with the initial reconnaissance stage in Fiscal Year 1996.

The primary purpose of this study would be to determine how best to design and site a wastewater reuse facility in order to assist water resource managers in efforts to satisfy the competing demands of agriculture, the Everglades National Park, and Florida Bay ecosystems restoration and the potable water supply needs of the residents of Dade County. The project is intended to complement the Central and Southern Florida project restudy and Florida's Everglades Forever Act.

An additional $500,000 is required in Fiscal Year 1997 to continue the reconnaissance study and initiate the feasibility study.

Miami Harbor Channel Dredging

The Port of Miami is the second largest general cargo port on the Atlantic Ocean. In addition, the Port is the home of 18 leading cruise ships, five of which are the world's largest megaliners. By the year 2010, general cargo tonnage moving through the Port of Miami will have more than doubled.

Due to these growth projections, it is critical that the dredging of the Port of Miami's main ship channel be completed expeditiously. That is why the Port of Miami is front funding the federal share of the project, pursuant to the Army Corps of Engineers Section 204 reimbursement program.

A timely reimbursement to the Dade County Seaport Department is required in order to avoid substantial negative impact on capital improvement programs for the port.

Approximately $10 million in federal funds will be needed in Fiscal Year 1997 to reimburse the Dade County Seaport Department for front funding this important project. To this end, I have joined with the other Members of the Dade Congressional delegation in contacting Secretary Martin Lancaster to request reprogrammed funds. Attached is a copy of that correspondence. An additional $10 million will be required in Fiscal Year 1997 in order to assure continued timely reimbursements to the Seaport Department.

In closing, I thank you again Mr. Chairman for the opportunity to testify before this Subcommittee on behalf of these projects that are important to the residents of South Florida.

WEDNESDAY, FEBRUARY 28, 1996.

FLORIDA PROJECTS

WITNESS

HON. DAN MILLER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. KNOLLENBERG. Mr. Young.

Mr. YOUNG. Mr. Chairman, next I would like to introduce another one of the Members of our very distinguished delegation, Congressman Dan Miller, who is my neighbor to the south, also with beach projects. And Dan has to be at a whip meeting shortly, so we will recognize him at this point.

Mr. MILLER. Thank you. Although, I am not here today regarding a beach renourishment project. We have a couple in my district which are very important programs, but today I am speaking for the Wares Creek Flood Control Project.

Wares Creek is a creek in Bradenton, Florida, my hometown, that floods a lot; and they have been working on it for a number of years. The county originally went through the Army Corps' 205(j) program. The 205(j) was a study for which the local government contributed $235,000. However, they found out that they cannot provide flood relief under the $5 million cap with in the 205(j) program.

The Wares Creek Flood Control Project has a 3:1 benefit ratio, so it is something that the Corps of Engineers believes is necessary. We were told to go through the authorization process, and we expect it to be included in the Water Resources Development Act, this year, at the same time we ask for the appropriation of this project.

It has a good cost-benefit ratio, and is an area that definitely has flooding. I guarantee you, I hear about it a lot, and it has a lot of nervous people living on the area in my county. So I will submit some written testimony and hope it can be included in this year's appropriation bill.

Thank you, Mr. Chairman.

Mr. KNOLLENBERG. It will be included.

[The statement of Mr. Miller follows:]

STATEMENT OF REPRESENTATIVE DAN MILLER (R-FL, 13th District)

Committee on Appropriations

Subcommittee on Energy and Water Appropriations

February 28, 1996

Thank you Mr. Chairman for giving me this opportunity to testify on behalf of a very important project in my district, the Wares Creek Flood Control Project in Manatee County. I am requesting this project, which is scheduled for authorization in the 1996 Water Resources Development Act, be appropriated accordingly in the Fiscal Year 1997 Energy and Water Appropriations bill.

The Wares Creek project is a crucial issue for Manatee County. Wares Creek and Cedar Hammock (east branch) are upper and lower reaches of the same stream. Wares Creek is the name attached to the downstream reach which lies mostly within the city limits of Bradenton, FL. The Cedar Hammock part of the stream is partly hardened urban drainage waterway that empties into Wares Creek, which in turn enters the Manatee River in Bradenton. The entire stream system covers about six square miles and drains along densely populated residential and commercial areas of Manatee County. Minor flooding occurs frequently all along the lower canal and creek, and rainfall events cause extensive property damage and disruption of traffic and normal business activities along adjacent highways.

Manatee County has been working with the Southwest Florida Water Management District and the Jacksonville U.S. Army Corps of Engineers since 1987 to study the historical flooding problems along Wares Creek and evaluate alternative plans to reduce flooding in the area. At the recommendation of the Jacksonville Corps, the County participated in the Corps' Continuing Authorities Program (Section 205(J) authorization) to study the project, with the County contributing more than $230,000 for the costs of the five year study, completed in March 1995. However, the Detailed Project Report (DPR) found that the recommended course of action would cost $14,961,100, exceeding the 205(J) program federal share cap of $5 million. The Corps therefore recommended that the County seek congressional authorization and appropriations for the project.

There has been some confusion over this sequence of events and adding to that confusion was the Clinton Administration's decision in 1995 to no longer provide flood control assistance, stating that state and local governments should bear the full costs. Now, in 1996, the Administration has modified this stand to provide some assistance. My office is currently working with the Transportation and Infrastructure Subcommittee on Water Resources and Environment, to have this project authorized in the Water Resources Development Act reauthorization which Chairman Boehlert's subcommittee is currently considering.

This project has great merit -- the Corps of Engineers has found a benefit-cost ratio of 3 to 1, validating the economic feasibility and also have issued a finding of No Significant Impact, underscoring its environmental preferability. It is estimated that the recommended plan would reduce average annual flood damages in the area by 57.4 percent. In a time where the Congress is having to appropriate money for disaster relief, it makes good sense to invest in preventive measures, particularly those rated as high as this project.

I hope the Subcommittee will consider carefully this request and attach for your consideration and the hearing record, a copy of the Corps' Finding of No Significant Impact and a copy of the Detailed Project Report.

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
P. O. BOX 4970
JACKSONVILLE, FLORIDA 32232-0019

REPLY TO
ATTENTION OF

FINDING OF NO SIGNIFICANT IMPACT
PROPOSED FLOOD REDUCTION MEASURES
CEDAR HAMMOCK EAST DRAINAGE CANAL AND WARES CREEK
BRADENTON, FLORIDA

I have reviewed the Environmental Assessment (EA) for the proposed action. Based on information analyzed in the EA, reflecting pertinent information obtained from other agencies and special interest groups having jurisdiction by law and/or special expertise, I conclude that the proposed action will have no significant impact on the quality of the human environment. Reasons for this conclusion are, in summary:

1. The study area is densely urban. It encompasses parts of the city of Bradenton and adjoining Manatee County. Significant or potentially significant cultural resources have been identified in the general study area; however, none will be affected by the proposed works. The State Historic Preservation Officer has concurred with this determination.

2. Fish and Wildlife habitats on the project are minimal due to the urban nature of the environment and current poor stream water quality. A Coordination Act Report provided by the U.S. Fish and Wildlife Service (FWS) did not identify significant fish or wildlife habitats requiring mitigation actions. The Florida Game and Freshwater Fish Commission concurred with the findings of FWS.

3. As a result of informal consultation under Section 7 of the U.S. Endangered Species Act, no threatened or endangered species or their habitat were identified on project lands according to the report cited in the preceding paragraph. Therefore, the project is in compliance with the Act.

4. Hydrologic and storm-water modeling performed as required by the Florida Department of Environmental Protection (DEP) indicated that construction of the proposed improvements would not lead to deterioration of surface water quality in lower Wares Creek nor increase the pollutant load to the Manatee River.

5. The proposed project has been determined to be consistent with the Florida Coastal Management Program.

6. Excess dredged materials will be deposited in the Manatee County landfill. There will be no discharge of dredged materials to waters of the United States.

7. A level 1 survey did not identify any areas likely to contain hazardous, toxic or radiologic waste along the proposed project area.

In consideration of the information summarized, I find that the proposed actions described in the Report and Environmental Assessment will not significantly affect the human environment and do not require the preparation and circulation of an Environmental Impact Statement.

13 APR 95
Date

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Commanding

CEDAR HAMMOCK (WARES CREEK)
DETAILED PROJECT REPORT SYNOPSIS
U.S. ARMY CORPS OF ENGINEERS

INTRODUCTION

The U.S. Army Corps of Engineers has recently completed a flood control study of the East Branch of the Cedar Hammock Drainage Canal (which includes Wares Creek). The purpose of the study was to evaluate alternative plans and develop a detailed plan to be recommended for implementation. Federal law requires that any plan recommended for Federal funding be economically justified (that is, the damages prevented by a plan are greater than the cost to construct the plan) and environmentally acceptable.

BACKGROUND

By letter dated July 21, 1987, Manatee County made formal application for a study of the Cedar Hammock Drainage Canal under the Section 205 Authority. This request was combined with a previous request by the city of Bradenton for a study of flooding problems along Wares Creek. A Reconnaissance report for the combined areas of Cedar Hammock and Wares Creek was completed in March 1990. The report identified an economically feasible and environmentally acceptable alternative for reducing flooding in the area. Therefore, further detailed study for the East Branch of the Cedar Hammock Drainage Canal was warranted.

A Feasibility Cost Sharing Agreement (FCSA) was signed between the Corps of Engineers and Manatee County, Florida, on December 17, 1990. The cost of the study is being shared 50/50 between the Corps of Engineers and Manatee County. The study was initiated in April 1991, following receipt of funds. The draft Detailed Project Report was completed in August 1994.

EXISTING CONDITIONS

The rain gage at Bradenton has rainfall records since 1913. Annual maximum one-day rainfall recorded at Bradenton from 1913 to 1993 are listed in the attached Table A-1. A hydrograph, Figure A-4, was developed to show the time needed for the stormwater runoff from the drainage basin to discharge from the mouth of the Cedar Hammock Drainage Canal. For this drainage basin, the time that it takes for the stormwater runoff from a given storm event to discharge from the East Branch of the Cedar Hammock (Wares Creek) Drainage Canal into Manatee River is a maximum of 24 hours.

A frequency analysis was performed using historical data to develop information about the expected future occurrence of certain magnitudes of storms. A number of factors are taken into consideration to develop the frequency of a storm event, such as: the size and shape of a drainage basin, as well as antecedent conditions or how much rainfall has already fallen in the basin in preceding days. Flood frequency is defined as the probability that a particular flood event will occur in any given year. For example, a 10-year flood has a 10% possibility to occur or a 50-year flood has a 2% chance of occurring in any given year.

The following table identifies the amount of rainfall in certain storm events for the study area:

Percent Chance Storm Event	24-hour Rainfall in Inches
50 % or 2-year	4.31
20 % or 5-year	5.82
10 % or 10-year	6.95
4 % or 25-year	8.59
2 % or 50-year	9.80
1 % or 100-year	11.19

Recent flooding problems experienced in Manatee County occurred during September 1988. Between September 5 and September 7, 1988, 14.75 inches of rain fell in the area. Table A-1 shows that the highest amount of rainfall in a given 24-hour period during that 1988 storm event was 5.84 inches, which occurred on September 7. Based on the rainfall intensities recorded for the storm at Bradentôn and in the vicinity, the 1988 storm was estimated as a 10 percent chance event.

The Manatee County Public Works Department assessed the county's damages from the storm and heavy rainfall. The summary of these damages are shown in table below. The damage was due to rainfall only, winds and tidal effects did not occur in the study area.

DAMAGES COMPILED BY
MANATEE COUNTY PUBLIC WORKS DEPARTMENT
OF SEPTEMBER 1988 STORM

DAMAGES	ESTIMATED VALUES
TO COUNTY MAINTAINED ROADS	$12,000,000 - 24,000,000
FROM SILTATION & NAVIGABLE CHANNELS	$500,000
TO COUNTY WASTEWATER SYSTEM	$75,000

Between June 23 and 29, 1992, a record setting rainfall occurred over west Central Florida. The flooding that occurred in the study area was also estimated to be a 10 percent chance event or 10-year flood. Damages to the study area, specifically, are not available.

The single-family residential and mobile home damage relationships for structural damage and content damage were estimated using actual claims information from the Federal Emergency Management Agency (FEMA) for the State of Florida during the period 1978 to 1985. Since damage estimates for multi-family residential were not available from FEMA, relationships developed in the Jacksonville District were used.

Average annual damages for the existing land use pattern in the study area are estimated to be $6.7 million. Flood damages under existing conditions are shown in the table below. The damages for a 10-year storm are estimated to be $22.2 million, affecting 2,684 structures. Plates 1 and 2 show the flooded areas for the 10-year flood under existing conditions.

DAMAGES AND BENEFITS
($ in thousands)
WITHOUT PROJECT CONDITIONS

	2-YEAR	5-YEAR	10-YEAR	25-YEAR	50-YEAR	100-YEAR	SPF
Number of Structures sceptible to ooding	139	1,128	2,684	3,293	4,192	4,507	5,185
Average Annual Damages	$41	$4,488	$22,254	$31,005	$51,308	$73,537	$182,221

While Plates 1 and 2 show the lateral extent of the flooding, Table A-2 provides the water surface elevation at the cross sections identified on the plates to show the depth of flooding.

It is important to note that in the analysis and design of the proposed project, large scale aerials with one-foot contours of the study area were used. For the purposes of this synopsis of the report; more convenient, smaller scale maps have been used to show the flooded areas. These smaller maps are older and do not accurately portray the existing contours in the study area.

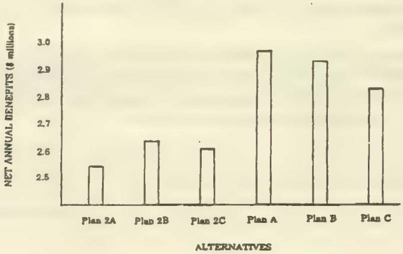
It also needs to be explained that while the flooded area maps show large areas of flooding even with the proposed project in place, the depth of flooding has been decreased. The depth of the flooded areas may only occur in the roadways or into the lawns of some residential areas. Most homes are built at least six inches to one foot higher than the adjacent roads. The water surface elevations should be referred to along with the slab elevation of a particular home to see if the home will actually be flooded.

PLAN FORMULATION

The purpose of this study is to investigate flooding and related problems, determine if feasible means for reducing these problems exist, and recommend the most appropriate course of action within the funding limits established under Section 205 of the Flood Control Act of 1948, as amended. The amount allotted under this Section for a project must be sufficient to complete Federal participation in the project. Not more than $5 million shall be allotted for a project at any single locality for the construction of small projects for flood control and related purposes not specifically authorized by Congress.

With this maximum limit of $5 million Federal funds available, the scope of possible flood reduction measures was necessarily limited. The Reconnaissance Report identified six plans that varied in cost from $6.8 to $17.5 million. Considering this preliminary identification of costs, analyzing larger scale measures to reduce flood damages would have added to the cost of the study, but would not have provided a feasible alternative.

A number of alternative flood damage reduction measures were developed in the feasibility study and six preliminary plans were analyzed: clearing and snagging, various types of channel modification, and bridge replacement. The Preliminary Benefit/Cost Comparison table on page 5 is a summary comparison of the proposed preliminary plans showing the benefits and costs associated with each alternative. The U.S. Army Corps of Engineers is required to determine the National Economic Development (NED) Plan, which is the plan which will provide the highest net annual benefits. Comparison shows that Plan A has the highest net annual benefits of the six plans. This is also shown visually on the graph below. Plan A was therefore chosen as the NED plan.



PRELIMINARY BENEFIT/COST COMPARISON[1]

	PLAN A	PLAN 2A	PLAN B	PLAN 2B	PLAN C	PLAN 2C
INITIAL COSTS						
Construction	7,031,000	7,465,000	7,794,000	7,891,000	11,143,000	10,661,000
Lands & Damages	2,068,000	5,302,000	2,068,000	5,302,000	2,068,000	5,302,800
Planning, Engineering & Design	562,000	597,000	623,500	631,000	891,000	853,000
Construction Management	492,000	523,000	545,600	553,000	780,000	746,000
SUBTOTAL	10,153,000	13,887,000	11,031,100	14,377,000	14,882,000	17,562,800
Interest during Construction	817,800	1,118,600	888,400	1,158,100	1,198,700	1,414,700
TOTAL INVESTMENT COST	10,970,800	15,005,600	11,919,500	15,535,100	16,080,700	18,977,500
ANNUAL COSTS						
Annualized Investment Cost	896,600	1,226,600	974,300	1,269,900	1,314,500	1,551,300
Annual O,M,R,R & R	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL ANNUAL COST	896,600	1,226,600	974,300	1,269,900	1,314,500	1,551,300
ANNUAL BENEFITS	3,860,700	3,825,500	3,910,100	3,910,900	4,142,900	4,162,500
NET ANNUAL BENEFITS	2,964,100	2,598,900	2,935,800	2,641,000	2,828,400	2,611,200
BENEFIT-TO-COST RATIO	4.3	3.1	4.0	3.1	3.2	2.7

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[1] 1993 Price Levels

PROPOSED PLAN

The Draft Detailed Project Report recommends a plan for construction of channel improvements on a 15,500-foot reach of the East Branch of the Cedar Hammock Drainage Canal. The plan reduces flooding in the study area by enlarging the channel section, therefore, lowering potential flood levels. The recommended plan, Plan A, includes the following channel improvements:

Manatee Avenue Bridge to 17th Avenue West - starting upstream of the Manatee Avenue Bridge modifications will include channel clearing only,

17th Avenue West to 21st Avenue West - construction of a trapezoidal grass-lined channel with 1V:2H side slopes, a 26-foot-bottom width and top width varying from 40 to 80-feet-wide. An additional 10 feet on each side will be needed for operation and maintenance purposes, requiring a total acquisition of 30 feet on each side of the existing top of bank,

21st Avenue West to 14th Street West (B.R. 41) - construction of a vertical sheet pile wall with a 40 foot bottom width. The sheet pile wall will be anchored with underground steel tie-back rods.

14th Street West (B.R. 41) to 44th Avenue West (Cortez Road) Bridge - resume construction of the trapezoidal grass-lined channel upstream of B.R. 41 (14th Street West) to just downstream of the 44th Avenue West (Cortez Road) Bridge, where project improvements terminate.

The recommended plan of improvements does not call for modifications to any bridges. However, the proposed channel design would modify the approach and getaway at numerous bridges. The recommended plan also does not propose deepening the channel.

The plan investigated provides approximately a 10-year flood protection and has a favorable benefit-cost ratio. The estimated project costs are $13.8 million. The Federal share would be $4.6 million and the Non-Federal share would be $9.2 million.

Plates 3 and 4 show the flooded area for the 10-year storm with the project constructed. Table A-2 provides the water surface elevation to show the depth of flooding. Flood damages with the project are shown in the following table. The damages for a 10-year storm are estimated to be $11.3 million, affecting 1,760 structures. For the 10-year storm, this is a reduction in flood damages of $10.9 million and 924 structures. Damage reduction may involve not only less homes being flooded, but also when there is less flooding in a home.

DAMAGES AND BENEFITS
($ in thousands)
WITH PROJECT CONDITIONS

	2-YEAR	5-YEAR	10-YEAR	25-YEAR	50-YEAR	100-YEAR	SPF
Number of Structures Susceptible to Flooding	3	177	1,760	1,944	2,806	3,285	5,038
Average Annual Damages	**$18**	**$120**	**$11,335**	**$14,109**	**$19,853**	**$27,976**	**$127,058**
Average Annual Benefits[2]	**$23**	**$4,368**	**$10,919**	**$16,890**	**$31,454**	**$45,562**	**$55,163**

The proposed plan would reduce annual average flood damages to $2.86 millon, a reduction of 57.4% of without project damages. This plan would result in average annual benefits of $3.86 million.

CURRENT STATUS

Coordination with the U.S. Fish and Wildlife Service, Florida Department of Environmental Protection, Southwest Florida Water Management District and other agencies has been conducted throughout the study. Coordination required by the National Environmental Protection Act was completed in December 1994.

SCHEDULE OF REMAINING WORK

The Final Report incorporating all comments received is scheduled to be completed in January 1995. The Report will be reviewed by Corps of Engineers higher authority and, if approved, funds to prepare the Plans and Specifications could be available by March 1995. Once Plans and Specifications have been initiated, it is estimated that acquisition of the Water Quality Certification and necessary Real Estate, receipt of Federal and non-Federal funds, and awarding of the construction contract would take three years.

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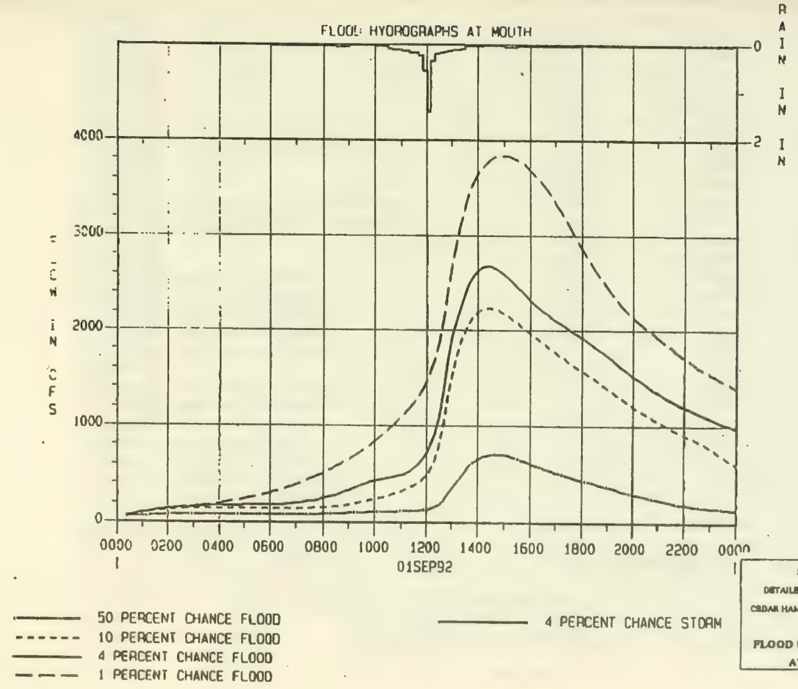
[2] Average Annual Benefits are calculated by subtracting Average Annual Damages for with project conditions from Average Annual Damages for the without project conditions shown in the table on page 3.

TABLE A-1

ANNUAL MAXIMUM ONE-DAY RAINFALL AT BRADENTON GAGE

CEDAR HAMMOCK (WARES CREEK)

YEAR	DATE	RAINFALL INCHES	YEAR	DATE	RAINFALL INCHES
1913	August 25	4.55	1954	May 31	4.24
1914	December 8	3.05	1955	June 19	3.60
1915	January 11	3.46	1956	July 29	2.13
1916	April 8	3.41	1957	September 20	2.75
1917	August 21	2.75	1958	July 11	3.26
1918	October 4	3.01	1959	June 18	6.20
1919	July 21	4.00	1960	July 29	5.74
1920	November 11	4.70	1961	September 13	2.83
1921	July 6	5.40	1962	September 21	7.37
1922	June 28	4.16	1963	June 24	5.35
1923	January 3	2.78	1964	June 30	3.75
1924	September 27	3.50	1965	June 8	2.68
1925	July 14	2.88	1966	January 22	2.68
1926	September 19	8.00	1967	June 18	4.78
1927	June 22	3.27	1968	June 4	5.84
1928	August 14	5.90	1969	June 14	4.54
1929	February 6	3.65	1970	August 9	3.82
1930	June 8	2.86	1971	August 14	2.94
1931	April 15	2.75	1972	June 18	4.39
1932	August 30	3.43	1973	July 23	2.39
1933	June 22	3.46	1974	June 27	4.68
1934	May 18	4.02	1975	June 22	3.23
1935	September 4	5.82	1976	May 16	4.83
1936	July 30	4.16	1977	August 23	4.14
1937	August 1	3.55	1978	May 5	3.69
1938	October 14	6.17	1979	September 21	3.05
1939	July 7	4.82	1980	July 3	2.27
1940	August 3	4.06	1981	August 26	3.84
1941	November 14	3.18	1982	June 18	3.91
1942	February 24	4.66	1983	October 16	2.93
1943	June 26	7.48	1984	July 16	2.77
1944	October 19	2.75	1985	March 22	2.26
1945	June 23	10.80	1986	July 13	2.86
1946	October 7	2.61	1987	March 27	3.41
1947	February 13	3.71	1988	September 7	5.84
1948	September 27	3.92	1989	August 25	2.88
1949	August 1	5.90	1990	October 11	5.80
1950	July 9	6.03	1991	May 20	3.37
1951	April 7	5.46	1992	June 26	7.67
1952	October 8	5.40	1993	October 16	2.91
1953	November 25	6.65			



SECTION 205
DETAILED PROJECT REPORT
CEDAR HAMMOCK (WARES CREEK)

FLOOD HYDROGRAPHS
AT MOUTH

FIGURE A-4

TABLE A-2

Cedar Hammock (Wares Creek) DPR
Flood Elevations, Ft. N.G.V.D.
10-Year Frequency

Station	Location	Water Surface Elevations Existing Conditions	With Project Conditions	Difference
3+82	D/S Edge of Modelled Area	1.5	1.5	0.0
20+14	Manatee Ave. Bridge	1.92	1.92	0.0
29+46	7th Ave. W. Bridge	2.94	2.85	0.09
39+00	9th Ave. W. Bridge	5.59	5.29	0.3
51+89		8.06	7.4	0.66
52+58	12th Ave. W. Bridge	8.8	8.22	0.58
59+62	14th Ave. W. Bridge	9.4	8.99	0.41
70+16		11.16	10.43	0.73
78+36	18th Ave. W. Bridge	13.2	12.77	0.43
84+31	19th Ave. W. Bridge	13.65	13.16	0.49
90+28	21st Ave. W. Bridge	14.57	13.63	0.94
95+36	23rd Ave. W. Bridge	15.65	14.60	1.05
100+59	26th Ave. W. Bridge	16.38	14.85	1.53
110+09		16.72	15.08	1.64
120+00		17.08	15.03	2.05
121+81	Triple Culvert @ 14 St Bridge	17.19	15.62	1.57
139+70	Concrete Foot Bridge near 9th St	17.48	16.44	1.04
153+45		17.97	16.99	0.98
159+70		17.99	17.02	0.97
170+20	Triple Culvert @ Cortez Rd Br	18.04	17.07	0.97
173+28		18.16	17.20	0.96
184+80		18.17	17.21	0.96
195+91		18.22	17.63	0.59
209+16		18.24	17.68	0.56
221+98		18.34	17.96	0.38
228+55		18.36	17.98	0.38

ENVIRONMENTAL ASSESSMENT

1.00 SUMMARY. This Environmental Assessment has been prepared by the Jacksonville District, U.S. Army Corps of Engineers (Corps) to document feasibility phase investigations of flood damage reduction measures along the east branch of Cedar Hammock drainage canal and Wares Creek, in the City of Bradenton and unincorporated Manatee County, Florida. Authorization for the study is contained in Section 205 of the 1948 Flood Control Act, as amended. Co-sponsor of the project is Manatee County. Flood damage reduction measures recommended are shown on Figures 1 and 2 and Plate 11. Proposed improvements would begin near the mouth of Wares Creek, on the south side of Manatee Avenue (S.R. 64), in Bradenton, and end on the north side of Cortez Road (44th Avenue West). Recommended improvements include the following: (1) snagging and clearing along lower Wares Creek, beginning south of the Manatee Avenue Bridge and extending upstream to 17th Avenue West, with some minor stream realignment recommended around the 9th Avenue West bridge; all of the snagging and clearing work to be accomplished within the existing channel; (2) Channel improvements beginning at 17th Avenue West and extending upstream to the north side of 21st Avenue West, consisting of a trapezoidal earthen channel with a 26 foot bottom width, 2 horizontal on 1 vertical side slopes and variable top width; (3) Channel improvements beginning at the south side of 21st Avenue West and extending through 30th Avenue West, ending at the 14th Street West intersection, consisting of a 40 foot wide, vertical walled, sheet pile lined channel; (4) Beginning at the intersection of 30th Avenue West and 14th Street West, extending upstream to the north side of Cortez Road (44th Avenue West) channel improvements consisting of a trapezoidal, earthen walled channel with 2 horizontal on 1 vertical side slopes and a 26 foot bottom width. Clearing and snagging and the channel improvements will generate about 100,000 cubic yards of excavated material, which will be removed to an upland disposal site (Manatee County landfill). An evaluation was made of the existing environmental resources and the probable environmental effects of implementing the alternatives discussed in the Detailed Project Report (DPR). Information on natural and man-made resources of the study area was obtained from existing sources, scoping responses from State and Federal resource agencies, studies performed under contract to the Corps, and provided by cooperating agencies and the co-sponsor. After consultation with the State Historic Preservation Officer, the U.S. Fish and Wildlife Service, Southwest Florida Water Management District and interested resource agencies and parties, the Corps has determined that no significant impacts to natural or man-made resources would result from implementation of the recommended plan. A preliminary Finding of No Significant Impact (FONSI) is attached to this Environmental Assessment (EA).

2.00 INTRODUCTION: THE PURPOSE OF AND NEED FOR THE PROPOSED ACTION. Cedar Hammock east branch and Wares Creek are upper and lower reaches of the same stream. Wares Creek is the name attached to the downstream reach, which is mostly within the city limits of Bradenton. The Cedar Hammock part of the stream is a partly hardened urban drainage waterway that empties into Wares Creek, which in turn enters the Manatee River in Bradenton. The entire stream system covers about 6 square miles and drains densely populated residential and commercial areas of Manatee County. Residential lots crowd particularly close along both banks of Wares Creek (between 9th Avenue West and 26th Avenue West). Two large shopping malls near the upstream end of the study area (Cortez Mall and De Soto Mall) contribute significant amounts of runoff from hardened roofs and parking areas. This urban drainage basin was mostly built up prior to current State and Water Management District regulations requiring retention of storm runoff, and lacks adequate storm water retention areas. Minor flooding occurs frequently all along the lower canal and Creek, and major rainfall events such as the well-documented flood of 1988 cause extensive property damage and disruption of traffic and normal business activities along Highways (Business) 41 and US 301. Refer to the Main Report and Appendix A (Hydrology and Hydraulic Analysis) for documentation of prior floods.

3.00 PROPOSED ACTION AND ALTERNATIVES ANALYSIS. The proposed plan (Plate 11) is a combination of clearing and snagging (along most of Wares Creek) and channel widening and other improvements (between 17th Avenue West and Cortez Road). Improvements are designed to reduce flood stages for all flood events, with a bank-full capacity greater than the 5 year flood event for most of the study reach.

Proposed improvements would begin near the mouth of Wares Creek, on the south side of Manatee Avenue (S.R. 64), in Bradenton, and end on the north side of Cortez Road (44th Avenue West). Recommended improvements include the following: (1) snagging and clearing along lower Wares Creek, beginning at the South side of the Manatee Avenue Bridge and extending upstream to 17th Avenue West, with some minor stream realignment recommended around the 9th Avenue bridge; all of the snagging and clearing work would be accomplished within the existing channel; (2) Channel improvements beginning at 17th Avenue West and extending upstream to the north side of 21st Avenue West, consisting of a trapezoidal earthen channel with a 26 foot bottom width, 2H on 1V side slopes and variable top width; (3) Channel improvements beginning at the south side of 21st Avenue West and extending through 30th Avenue West, ending at the 14th Street West intersection, consisting of a 40 foot wide, vertical walled, sheet pile lined channel; (4) Beginning at the intersection of 30th Avenue West and 14th Street West, extending upstream to the north side of Cortez Road (44th Avenue West) channel improvements consisting of a trapezoidal, earthen walled channel with 2H on 1V side slopes and a 26 foot bottom width. All materials excavated would be removed and trucked to an off site upland disposal area, the Manatee County landfill.

Other alternative courses of action evaluated but not recommended as effective include no action, upstream flood retention, re-routing of one tributary, various combinations of downstream bridge removals, evacuation of residents, further widening and/or deepening of the Cedar Hammock east drainage system, and other types of flood protection, including flood-proofing. Removal of a larger number of residences would not be cost-effective, due to the extremely dense development of surrounding neighborhoods and prevailing high real estate values in the Bradenton Metropolitan area. While upstream retention might have offered an effective solution many years ago, at present the parts of the watershed most in need of retention areas are built out into medium or high density residential and commercial property and a diligent search during the feasibility phase of the study did not identify sufficient undeveloped lands to retain a significant proportion of the runoff in most sub-watersheds. The vacant lot that had been identified in the Reconnaissance Report (located near the head of the western tributary of the Cedar Hammock East Branch) would not have contributed significantly to flood reduction, since this sub-watershed already has sufficient retention areas. Re-routing of part of the western tributary was likewise evaluated and not recommended, since it was found to worsen flood stages upstream along the eastern tributary, where flood problems were most severe. Greater widening of the east sub-tributary of the Cedar Hammock Canal was considered but not recommended because the cost would have far exceeded Federal cost limitations under the Section 205 (Continuing Authorities) program. Raising of one or more downstream bridges would have provided additional flood relief, but, as in the case of greater channel widening, the additional costs would have been borne by the non-Federal partner, who opted not to endorse this action. Likewise, flood-proofing structures by raising the general ground level would be enormously costly at this late stage in watershed development. It was determined that the proposed plan, in combination with all applicable non-structural alternatives, including a program of vigorous and regular channel cleaning and debris removal, was the only effective medium-term solution to the flooding and water quality problems in the study area.

4.00 AFFECTED ENVIRONMENT. The watershed of Cedar Hammock East Branch/Wares Creek covers about 6 square miles. Topography is nearly flat in the western part of the watershed and steeper in the eastern tributary branch. The lower watershed includes mostly single family residential structures, including a large number of manufactured homes (mobile homes). Residents of a widespread area are affected by the largest flood events. Homes, schools, churches, commercial and industrial properties and urban infrastructure elements, including sanitary sewers, are affected. Under existing conditions even a 50% ("2 year") recurrence flood causes significant interruption of commerce and daily life.

4.01 **Air quality and Noise.** In general, air quality in the Bradenton area and the rest of Manatee County is good. There are no non-attainment areas within the County. The largest industrial emitters in the County are a large power plant, a phosphate mining operation and a citrus processing plant, all located in the eastern part of the County at a considerable distance from the study reach. The urban environment is fairly noisy in the daytime, especially near Manatee Avenue and along the Cedar Hammock East Branch reach that runs close to Business 41.

4.02 **Water quality.** There are no permanent water quality stations along Wares Creek or Cedar Hammock East Branch. Water quality data for this part of the Cedar Hammock basin is taken sporadically and little published information is available. Except during high rainfall periods the predominant source of flow is groundwater exfiltration and the stream supports small fish and invertebrates as well as the wading birds that feed on them (refer to

Paragraphs 4.05 and 4.06). Due to the impervious nature of a substantial part of the watershed and the lack of on-site retention, urban and primarily residential storm runoff arrives at the stream with most of its conventional pollutant load in solution or suspension. The stream does not appear to be affected adversely by existing storm water flow as it supports healthy populations of biota as mentioned above.

4.03 **Cultural resources.** Initial coordination with the Florida Division of Historical Resources indicated that no known archeological or historic properties were recorded in the project area. In letters dated January 19, 1989 and March 28, 1989 the Florida State Historic Preservation Officer recommended that a cultural resources survey be completed to locate and assess the significance of historic properties that could be affected by the proposed project. A cultural resources survey was conducted by historic preservation staff of the U.S. Army Corps of Engineers on 9-10 March 1992. The survey included archival research and a surface and subsurface inspection of the project area, including alternatives that would affect bridges and residences. At the Manatee County Historical Library investigators examined ca. 1851 military maps of the project area, 1915 Sanborn Insurance Maps, and a series of aerial photos from 1940, 1951, and 1969. During the inspection of the project area investigators examined potentially significant historic features that were identified from the maps and aerial photos, examined exposed ground surfaces and excavated judgmentally placed shovel tests searching for intact archeological deposits. Three bridges crossing Wares Creek at 7th; 9th, and 12th Avenues and several residential structures north of 30th Avenue may be historically significant and eligible for inclusion on the National Register of Historic Places. No potentially significant architectural features were identified south of 30th Avenue, and no significant archeological sites were located within any part of the project area.

4.04 **Aesthetic resources.** Aesthetic resources are defined as "those natural and cultural features of the environment that elicit a pleasurable response" in the observer, most notably from the predominantly visual sense. Consequently, "aesthetic resources are commonly referred to as visual resources, ... features which can potentially be seen."

The existing aesthetic resources within the study area are considered to contribute important visual relief to the immediate surroundings and neighborhood character throughout the proposed project. Visual aesthetics of the area surrounding the stream are typical of older single-family residential and small scale commercial neighborhoods, with rather closely-spaced houses, mature landscape trees, many small residential neighborhoods and relatively large expanses of concrete and asphalt in relation to green spaces. The general exception is constituted by the banks of Wares Creek. Somewhat more "natural" creek settings are immediately visible from the many small bridges that cross the creek; examples would be bridges at 9th, 12th, and 14th Avenues. The creek is almost completely shaded by mature tree canopies from 14th to 21st Avenue; the tree cover provides a relaxing and cooling experience. From 21st to 23rd Avenues the project study area possesses aesthetic value because of the mature native trees on maintained grassed banks. These trees provide the dense residential development with a visual and auditory screen, color, and cooling relief from the otherwise flat urbanized area. Upstream of the fire station bridge, a row of mature shade trees screen a residential development from the heavy traffic of Business 41. Channel areas to the south possess patchy mature tree areas with lower aesthetic value due to washed out banks, unmowed wild native perennial grasses, cross bracing, and dense commercial development along Highway 301.

4.05 Wildlife resources. Field visits and consultation with the U.S. Fish and Wildlife Service Vero Beach Field office (FWS) did not lead to identification of any critical populations or habitat resources in the area of the project. In response to early scoping for environmental issues, the State of Florida Game and Freshwater Fish Commission (FGFWFC) identified the following Endangered (E), Threatened (T), or State Species of Special Concern (SSC) as potentially present in the project area: West Indian manatee (E), wood stork (E) bald eagle (T), southeastern American kestrel (T), eastern indigo snake (T), Sherman's fox squirrel (SSC), American oystercatcher (SSC), snowy egret (SSC), tricolored heron (SSC), reddish egret (SSC), brown pelican (SSC), gopher tortoise (SSC), American alligator (SSC) and common snook (SSC). However, studies performed by U.S. FWS under the Fish and Wildlife Coordination Act (Coordination Act Report) did not find significant populations or even habitat suitable for these species in the study reach. Wading birds, including the snowy egret and wood stork, may sporadically visit the stream and feed on its fish and invertebrate fauna, but no adequate reproductive habitat occurs within the study reach, due to the dense urban surroundings and the inevitable presence of feral and domestic animal predators. Manatee habitat does exist at the mouth of Wares creek with the Manatee River, where deeper water is available; however, the study reach is too shallow to provide habitat for manatee, mature snook, or mature alligators. In addition to the above species, FWS and FGFWFC identified the Florida Scrub Jay (E) as potentially present in the undeveloped brush surrounding the upstream detention area along the west tributary to Cedar Hammock East Branch. However, as part of a Planning Aid study undertaken during the project's Reconnaissance phase, this area was inspected by Service biologists with negative results. Both FWS reports, which are reproduced in the Coordination Appendix, conclude that none of the above listed species are regularly present in the study reach, and no significant habitat for these species is present.

Birds are the most notable wildlife resource in the drainage basin. All common species of waders probably visit the stream; in addition to the species listed above, white ibis and little blue heron were observed feeding along the stream during biologists' site visits. A midstream shoal island just south of the Manatee Avenue bridge supports a young mixed stand of black and white mangroves. These shrubby trees were frozen to ground level in December, 1989, but have recovered by vigorous sprouting in subsequent years. During initial project planning the Corps was requested to consider removal of the shoal, but hydraulic studies showed that it does not contribute to upstream flooding, and its removal is not part of the presently proposed project. This small island is a significant refuge and possibly a night roost for wading birds, including tricolored, great and little blue herons. Its isolation in the middle of the stream makes it inaccessible to some urban predators, most notably domestic cats, while the waders find abundant food resources in the small fish and invertebrates that inhabit the stream.

4.06 **Fish resources.** Except in the estuarine reach (generally, downstream of the 9th Avenue bridge in Bradenton), the stream is too shallow and narrow, and its water levels fluctuate too abruptly in response to rainfall-generated runoff, to support a great diversity of aquatic life. The Planning Aid Report (PAR) prepared by FWS lists mosquito fish, soft shelled turtles and other turtles as dominant faunal elements. Other freshwater fauna include diving beetles, insect larvae and small snails. The estuary supports small or juvenile individuals of mullet, needlefish, sand perch, sheepshead and killifish, and may provide some limited developmental habitat for juveniles of other estuarine fish. The fish fauna is essentially washed out of the watershed into the Manatee River during major flood events, re-establishing itself during intervening normal flow periods. Due to regular bank clearing by the County and city public works crews, creek bank habitat is moderately to severely limited.

4.07 **Hazardous, toxic and radiologic waste.** A preliminary assessment was conducted in March 1994 to address the existence or potential for occurrence of HTW contamination on lands, including structures and submerged lands, in the Cedar Hammock/Wares Creek study area. The assessment included a project review, site literature/document review, and site reconnaissance. During the reconnaissance, the following potential indicators were looked for: Landfills, dumps, disposal areas; burning or burned areas; aboveground or underground tanks; vats, lagoons, ponds or basin sludge pits; excavations (pits, quarries or borrow areas); containers of unidentified substances; spills, seepage, slicks; odors; dead or stressed vegetation (brown, spotted curled or withered leaves); water treatment plants; wells, ditches, trenches, depressions; transport areas (i.e., boat yards, harbors, rail yards, airports, truck terminals); abandoned buildings. The preliminary assessment report found no indicators of toxic or radiologic waste.

5.00 ENVIRONMENTAL EFFECTS OF THE PROPOSED ACTION.

5.01 **Unavoidable adverse effects.** Clearing and snagging at the mouth of Wares Creek will cause temporary adverse effects on wildlife habitat and fish resources due to noise of heavy machinery, disturbance of the substrate and temporary increases in water turbidity due to excavation. However, creek bottom sediments are fairly coarse (mostly sand-size) and natural settling will quickly restore stream clarity. Furthermore, stabilization of the bank slope will decrease future sedimentation due to rainstorm events. The only permanent wetland that will be affected on project lands is the stream bottom itself. The stream cross-sectional area will be widened over its present dimensions, providing additional substrate for in-stream organisms during low flow periods. However, as at present, extreme flood events will essentially wipe out attached benthic vegetation and flush out invertebrate and fish fauna, which will then gradually re-establish when the flood has abated. The mangrove-colonized sand island downstream of the 7th Avenue Bridge, once proposed for dredging by the co-sponsor, exerts no influence on upstream flood levels, and is not proposed for removal. Since no significant wetlands resources will be affected, no specific wetland mitigation measures are proposed.

Some mature or specimen size shade trees will be removed along the channel right-of-way. These trees belong to common native or exotic species used for urban landscaping, and do not constitute significant natural resources. However, they contribute to soften the appearance of the existing channel and provide some wildlife cover. Their removal will change the appearance of the channel and reduce available shade over the water in some reaches. Tree removal will affect the visual esthetics of the project reach, and replacement plantings are recommended (refer also to Paragraph 5.09).

5.02 **Relationship between short term uses of the environment and maintenance and enhancement of long term productivity.** The human environment is already committed to long term residential use. The project discussed in this EA is designed to sustain and improve the quality of the existing human-dominated environment and increase business productivity by reducing the risk and frequency of flooding. No significant or highly productive natural habitats have been identified on the watershed in the study reach; furthermore, water quality modeling indicated that no change in the quality or contaminant levels in the receiving waters (the mouth of the creek) would be induced by project construction. Therefore, no trade-offs of long term productivity for short-term use can be identified in relation to the proposed project.

5.03 **Irreversible or irretrievable commitments of resources.** No new irreversible commitments would be made by the proposed project. No additional natural areas would be committed or converted to urban use by the proposed project. The stream reach proposed for installation of vertical sheet pile reinforced channel walls already has a vertical or near-vertical cross-section, and most of it is now bulkheaded on one or both sides with concrete. Most commitments of resources have already been made in the study area. Almost the entire stream drainage is now committed to urban residential and commercial use, and this status is unlikely to change in the foreseeable future.

5.04 **Relationship between the proposed action and Federal, State and local land use policies, plans and controls.** The proposed flood control project is consistent with improvements recommended in prior flood control studies performed for Manatee County and the City of Bradenton, although it is smaller in scope than many prior proposals, since it does not include bridge removal or rerouting of the western tributary of Cedar Hammock East Branch. During plan formulation a number of potential sites for additional storm water retention were identified, but these sites were determined to offer inadequate capacity to significantly reduce flooding or contaminant loading, while at the same time greatly increasing project cost. Bridge removal options were considered but not recommended due to their extremely high cost in relation to the flood reduction benefits they potentially would have generated. Rerouting of the western East Branch tributary was dropped from further consideration when hydraulic studies indicated that this alternative would actually worsen flooding conditions upstream.

The proposed project has also been evaluated for consistency with the Florida Coastal Zone Program and determined to be consistent. It would not cause adverse impacts on water quality or significant marine or estuarine resources; it would contribute to reduce sedimentation of lower Wares Creek, by providing armoring for those sections of the stream that would experience high water velocities, while providing a grass-lined bank with stable side slopes for the rest of the project reach. Relationship between the proposed action and Federal, State and local land use policies, plans and controls.

5.05 **Effects on community growth, cohesion and the displacement of people and businesses.** An estimated 11 mobile homes, located in the Bradenton Trailer Park, would need to be removed in order to allow staging and permanent maintenance access to the vertical-walled section of Cedar Hammock. No other residences or businesses would be displaced. Clearing and grubbing along the Wares Creek segment will be accomplished by placing equipment within the banks, thereby avoiding unnecessary takings of or disturbance to private properties. Access and permanent right-of-way easements have been minimized there as well as throughout the rest of the project. There will be no other permanent effects on community cohesion. No businesses would be displaced. Since the communities surrounding the study reach are already densely developed, and the purpose of the recommended plan was to avoid unnecessary and costly taking of properties along the stream, implementation of the plan, while it would not stimulate new growth, will not interfere with existing infrastructure, buildings or commerce.

5.06 **Air quality and noise effects.** Some temporary local increase in particulate and hydrocarbon emissions are expected while the project is under construction, due to the movement of heavy equipment (dump trucks) through the neighborhood to the county landfill. However, all applicable air quality regulations will be implemented to minimize these effects. Once the project is built air quality will be the same as under without-project conditions. The operation of construction machinery will create additional noise that is likely to disturb some residents living immediately adjacent to the creek during daytime hours. All construction activities would be accomplished during normal working hours, and appropriate noise-suppression equipment would be installed on construction vehicles. The noise environment of the study reach would return to normal once the project is built.

5.07 **Water quality effects.** The Florida Department of Environmental Protection (DEP) and the Southwest Florida Water Management District (SWFWMD) recommended a modeling study of storm water runoff under with-and-without project conditions, to determine if the proposed improvements would worsen water quality over existing conditions at the downstream end of the proposed project. The model chosen was the Corps water quality model HEC-5Q. The modeling study and its results are discussed in Appendix F. The conclusion, based on the model runs, was that estimated nutrient and pollutant loads of the conventional chemical constituents modeled would be no different under with-and-without project conditions; that is, there would be no increase in loads to the receiving waters (Manatee River and eventually Tampa Bay) under design flood conditions, as compared to present conditions. This was due primarily to the short retention times in the system. There would also be no net overall increase in loading, specifically nutrients and selected other constituents, to the receiving waters. The long-term water quality effects of the project are neutral.

5.08 **Effects on cultural resources.** The three bridges crossing Wares Creek at 7th, 9th, and 12th Avenues and the residential structures north of 30th Avenue which may be eligible for inclusion on the National Register of Historic Places will not be affected by the proposed action. As documented during the cultural resources survey completed in 1992, no other potentially significant historic properties are located within the project area. Based on the results of the survey, and in compliance with the National Historic Preservation Act of 1966, as amended (PL 89-655) and its implementing regulation 36 CFR Part 800, the U.S. Army Corps of Engineers determined that this proposed project would have no effect on properties listed on or eligible for listing on the National Register of Historic Places. In a letter from the Florida State Historic Preservation Officer (SHPO) dated October 10, 1991, and in subsequent telephone conversations in April 1992, the SHPO concurred with this determination. If, during construction, it is determined that previously undiscovered historic properties will be adversely affected by the project, a mitigation plan will be developed, in consultation with the SHPO, and completed. All work will be conducted in compliance with the National Historic Preservation Act of 1966, as amended (PL 89-655) and the Archeological and Historic Preservation Act, as amended (PL 93-291).

5.09 **Aesthetic effects.** The implementation of the flood control channel improvements would clear the young native and exotic plant material from the channel and side slopes to increase capacity and flow rate in the "clearing and snagging" area. Aesthetics will be permanently affected by this project component. The trapezoidal grass-lined channel will enlarge the existing channel and take down all trees within the construction easement. Grassing channel side-slopes, where channel bank widening and reshaping will occur, is the recommended construction method for bank stabilization and aesthetic treatment. Vertical sheet pile walls beginning "just upstream of 21st Avenue" will denude the stream bed and construction easement of trees in a community park and the densely developed Bradenton Mobile Home Park. Perpetual underground tie-backs proposed for the sheet pile walls will also require tree removal for installation. Trees within the permanent project easements will be cleared to provide access for channel improvements. Staging areas have been located. Temporary impact on existing aesthetics are anticipated in these areas. However no long term adverse aesthetic impacts are anticipated to the project staging areas at this time.

The concept of an aesthetic mitigation plan is to restore the aesthetics to their pre-project condition. A tree survey is recommended as part of the plans and specifications study phase so the project can appropriately include existing trees in the final design. Project channel improvements could reflect the existing neighborhood landscape practice by "trimming up" low growing tree limbs instead of clear cutting trees in the "clearing and snagging" phase. The trapezoidal channel work could consider bulkheading trees which fall into the "channel construction" areas. Trees within the construction easement could be preserved, not clear-cut. If low tree limbs deny construction access, they could be properly pruned to maintain natural tree form and healthy tree growth.

Manatee County has a tree replacement ordinance in the County zoning and planning code. Tree replacement is the final and ultimate endeavor which has the greatest chance to restore impacts to aesthetics altered by the channel improvement project. The local sponsor could accomplish tree planting through contracts or volunteer programs similar to the Jacksonville Gator Bowl Tree Planting Project. The benefit of native, southern wildflower seed mix would be realized with the decreased cost of mowing and the increase of aesthetics in the area. Detailed aesthetic plans and specifications will be developed once a final survey is completed. A $50,000 budget for tree replacement would adequately fund the planting of three gallon sized native trees by volunteers, based on the tree plantings at the Gator Bowl interchange in Jacksonville, Florida.

5.10 **Effects on fish and wildlife resources.** Clearing and grubbing, channel widening and bank stabilization during construction will cause temporary removal of bank slope vegetation and stream bottom vegetation, leading to mortality, disturbance or emigration of the stream fauna. After construction is complete stream bottom habitat will restore itself through re-seeding of aquatic plants and re-migration of small fish; but these organisms will continue to be (as at present) susceptible to total or partial wipe-out during heavy runoff events. Removal of trees inside the 10' wide maintenance right of way on each side of the channel will reduce shading of the channel bottom and may slightly increase daytime water temperatures in affected reaches. This factor is not expected to significantly affect overall water quality, because long stretches of the stream are already cleared of overhanging vegetation. Fish and wildlife resources of the study reach are minimal, consisting of small or transient populations of few species, mostly of small freshwater and estuarine fish and wide-ranging wading birds. Neither the Planning Aid Report (PAR) written during the reconnaissance phase of the study, nor the draft Coordination Act Report (CAR) submitted during feasibility stage studies have identified significant fish and wildlife resources. The U.S. Fish and Wildlife Service stated in the CAR that it has no objections to the project as proposed, although it did criticize the small detention areas once considered (during plan formulation), because it feared they might attract wildlife and subject it to unnecessary predation and traffic dangers.

5.11 **Effects on property values.** The proposed project would not cause severance of significant areas of property from parent tracts. Most of the proposed channel maintenance easements take small portions of the rear of tracts: "back yards". No effect is expected on the value of the remainder of affected tracts. Property values of tracts adjacent to Cedar Hammock/Wares Creek may now be lower than those of similar properties outside the flood zone (because of their susceptibility to frequent flooding). These existing residential and commercial properties adjacent to the study reach may increase in value if the project is built and flood frequency is reduced.

5.12 Cumulative effects. There are no additional Corps projects in the Wares Creek watershed. All of the presently foreseen project impacts are accounted for in this environmental document. Construction and operation of the proposed channel improvements for flood control will increase the cumulative urbanization of the watershed through further human-induced alterations of the Wares Creek channel; but this process is already so far advanced that impacts on natural resources would be minimal or insignificant.

6.00 COMMITMENTS.

Since no significant natural or cultural resources have been identified inside the proposed project reach, no mitigation commitments have been made to date. Should evidence of such resources be discovered during later stages of project development, consultation with the appropriate resource agencies would be re-initiated and appropriate mitigation would be considered and/or implemented as appropriate.

7.00 COMPLIANCE WITH ENVIRONMENTAL REQUIREMENTS.

7.01 Clean Air Act. The project will comply with the Clean Air Act. Coordination with DEP and the Manatee County Department of Public Works indicated that the project is sited inside an attainment area. The project is not expected to cause any significant new atmospheric emissions. Applicable air quality regulations will be strictly followed.

7.02 Clean Water Act. An evaluation of the water quality effects produced by proposed modifications to the waterway has been completed as required under the Clean Water Act. This evaluation is reproduced as Attachment A. The project is specified as complying with the Act. A Water Quality Certificate from the State of Florida certifying that State water quality standards will be not be exceeded will be applied for. Tampa Bay, to the north, and Sarasota Bay, to the south, are National Estuary Program sites under the Clean Water Act. None of the improvements proposed in this study would affect water quality in these estuaries.

7.03 Coastal Zone Management Act. This study and project are in compliance with the policies of the Coastal Zone Management Program of Florida. The Consistency Evaluation is found as Attachment B of this Environmental Assessment.

7.04 Endangered Species Act. No species designated under this act occur in the area. No resting, feeding or reproductive habitat of any designated species occurs in the area. Informal consultation under Section 7 of the Act was concluded during the reconnaissance phase of the study (Attachment C). The Coordination Act Report (CAR) reconfirmed the absence of Federally designated endangered or threatened species or other significant wildlife populations. The CAR is reproduced in Appendix G (Coordination).

7.05 **Estuary Protection Act.** This Law provides for Federal designation of Estuaries of National Significance, and consultation with the Secretary of the Interior for projects that may impact such estuaries. The Wares Creek estuary is not part of such a designated area.

7.06 **Fish and Wildlife Coordination Act.** The proposed project has been coordinated with the Vero Beach Field office, U.S. Fish and Wildlife Service; a Coordination Act Report (CAR) is included in Appendix G. The CAR states that no significant fish or wildlife resources occur along the proposed project alignment. Nevertheless, they recommend stream "rejuvenation" measures for fish and wildlife habitat enhancement along lower Wares Creek (widening meanders, creation of riffles, etc) that would require a much wider real estate footprint than the current clearing and snagging proposed by the Corps, and would require extensive additional land acquisition through densely developed residential neighborhoods. Since this proposed "rejuvenation" is for the purposes of enhancing stream habitat quality, it does not consider flood retention capacity, nor the probable effects of existing frequent floods on such a "rejuvenated" floodplain, if it were built. The proposal was not further considered, because the CAR states that no significant habitat will be impacted by the recommended project; therefore there is no justification for the improvements proposed.

7.07 **National Historic Preservation Act.** This law requires Federal agencies to take into consideration the effects of their undertakings on historic properties, and to afford the Advisory Council on Historic Preservation or the State Historic Preservation Officer the opportunity to comment on the effects of the undertaking. This project is in full compliance with the National Historic Preservation Act.

7.08 **National Environmental Policy Act (NEPA).** An Environmental Assessment (EA) of the potential effects of the proposed snagging and clearing has been conducted. The draft document has been coordinated for public comment and comments received. Based on the results of the EA and comments from various state and federal agencies as well as nonprofit and private parties, the NEPA process will be finalized.

7.09 **Resource Conservation and Recovery Act.** A preliminary (Level 1) assessment was carried out in October, 1993 to detect the possible presence of toxic, hazardous or radiologic waste. No indicators of toxic or radiologic waste were observed.

8.00 COORDINATION. Interagency coordination of the Cedar Hammock/Wares Creek flood control studies began in 1987 when a letter was received from Manatee County requesting assistance in a study of the Cedar Hammock East Branch. This request was combined with a previous request, dated January 11, 1984, by the city of Bradenton for a study of flooding problems along Wares Creek. A Reconnaissance Report was published in March 1990. The Reconnaissance study was coordinated with the Florida State Historic Preservation Officer, the Department of Environmental Regulation, the Department of Community Affairs and Department of Natural Resources. Early scoping for the feasibility phase study was completed in 1991 and early 1992. Potential environmental issues that surfaced during early scoping included: potential effects on threatened, endangered, or State species of special concern; potential adverse effects of further hardening and channeling on downstream water quality; potential water quality effects on outstanding Florida waters; compatibility with the SWIM Plan for Tampa Bay, and basin-wide stormwater modeling. (Refer to Main Report Appendix F). These issues have been discussed where applicable in the Detailed Project Report and this Environmental Assessment.

All substantial comments received during public coordination of the draft Detailed Project Report and Environmental Assessment are compiled as Attachment C of this EA. Please refer to Attachment C for responses to pertinent comments.

9.00 LIST OF PREPARERS. The following persons were substantially responsible for the contents of this Environmental Assessment: Barbara Cintrón, Biologist (principal compiler); Kimberly Koelsch, Biologist; Jim McAdams, Environmental Engineer; David McCullough, Archeologist; Paul Stevenson, Landscape Architect; Priscilla Trigg, Civil Engineer.

10.00 REFERENCES.

U.S. Army Corps of Engineers 1990. Reconnaissance Report. Cedar Hammock (Wares Creek), Manatee County, Florida. Flood Control Section 205 Study. Planning Division, Jacksonville District U.S. Army Engineer Division, Jacksonville Florida. 23 pp, Plates, Appends.

Carroll, J. 1989. Planning Aid Report, Cedar Hammock, Bradenton, Manatee County. U.S. Fish and Wildlife Service, Vero Beach Field Office, Vero Beach, Fl. 3. pp.

Gallagher, J., 1993. Draft Fish and Wildlife Coordination Act Report, Wares Creek/Cedar Hammock Flood Reduction Project, Bradenton, Manatee County. October, 1993. U.S. Fish and Wildlife Service, Vero Beach Field Office, Vero Beach, Fl. 9 pp, figures.

WEDNESDAY, FEBRUARY 28, 1996.

FLORIDA PROJECTS

WITNESS

HON. TILLIE K. FOWLER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. YOUNG. Mr. Chairman, thank you very much, and next I would like to introduce the distinguished gentlewoman from Jacksonville, Mrs. Tillie Fowler, a member of the National Security Committee.

Mrs. FOWLER. Thank you, Mr. Chairman. I appreciate the opportunity to be here today also, and I also have a coastal region. I start at the Georgia line and go down to Daytona Beach through Nassau, Duval, St. Johns, Flagler and Volusia Counties with over 100 miles of coastline, so I have a little bit more coast than you, Clay, and several ports and navigation channels. These are really a critical resource for my district, and their maintenance and protection is very important. So I am here today to urge funding for several projects in my district.

I am not going to go into the details of them now; I will submit a list. But they range from beach renourishment projects to bridges over the intercoastal waterway to flood control.

I would like to take a few minutes to thank you, as the Chairman did, for your support on beach renourishment this past year. It is critically important even though the President has not included that in his budget. I don't support his belief that beach renourishment is not of a national interest because the beaches and coastal areas are sources of tremendous national pride.

Mr. Shaw has detailed some of the economic impact. We have millions of American and foreign tourists who flock to those areas all year, every year to enjoy clean, safe and beautiful beaches; and to say that they are only of interest to the States in which they are located is like saying Yosemite is only of interest to the State of California. I think we have to keep in mind how important these are.

I want to thank you for recognizing the importance of our Nation's beaches last year, and we look forward to continuing to work with you in protection of these natural resources.

Mr. KNOLLENBERG. I would remind the Floridians that a whole lot of your populace happens to be transplanted Michiganders, and from Indiana and so forth, but they are happy down there. I know what the draw is, and as Mr. Shaw pointed out, there is obviously a very big economic impact to these beaches.

[The statement of Mrs. Fowler follows:]

TILLIE K. FOWLER
4TH DISTRICT, FLORIDA
DEPUTY MAJORITY WHIP
REPUBLICAN STEERING COMMITTEE

NATIONAL SECURITY COMMITTEE
SUBCOMMITTEE ON MILITARY READINESS
(VICE-CHAIRMAN)
SUBCOMMITTEE ON MILITARY INSTALLATIONS
AND FACILITIES

TRANSPORTATION AND
INFRASTRUCTURE COMMITTEE
SUBCOMMITTEE ON COAST GUARD
AND MARITIME TRANSPORTATION
(VICE-CHAIRMAN)
SUBCOMMITTEE ON SURFACE TRANSPORTATION

Congress of the United States
House of Representatives
Washington, DC 20515–0904

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STATEMENT BY CONGRESSWOMAN TILLIE K. FOWLER

BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON ENERGY AND WATER

February 28, 1996

Mr. Chairman and Members of the Subcommittee, I appreciate the opportunity to testify today in support of the Fiscal Year 1997 funding for water resource projects in Florida's Fourth Congressional District.

My district is a coastal region comprising Nassau, Duval, St. Johns, Flagler, and Volusia counties. My district encompasses over 100 miles of coastline and has several ports and navigation channels. These resources provide avenues of commerce, transportation routes and access to military facilities; create fishing livelihoods, provide property protection and are the source of countless means of recreation. They are a vast and crucial resource for my district and their maintenance and protection is very important.

I am here today to urge funding for several projects in my district. These range from beach nourishment projects, to bridges over the Intercoastal waterway to flood control projects. Given their varied and detailed nature, I would like to submit this list of needs to the subcommittee under separate cover and spend today's time talking about the need to continue funding beach nourishment projects.

The President in his FY96 budget proposed an end to federal funding of beach nourishment projects on the basis that they were not in the "national interest." While I welcome the President's accompanying statements about the need to balance the federal budget, I do not support his belief that beach nourishment is not a national interest worthy of federal assistance.

This Nation's beaches and coastal areas are the source of national pride. Millions of American and foreign tourists flock to these areas every year, all year, to enjoy clean, safe and beautiful beaches. To say that these areas are only of interest to the states in which they are located is the equivalent of saying that Yosemite is only of interest to the State of California.

Last year, this Committee wisely recognized the importance of our Nation's beaches and coastal areas and funded many beach nourishment projects. I applaud the Committee's decision in this regard and look forward to continued protection of these beach resources.

Again, thank you for the opportunity to testify before the subcommittee this morning. I deeply appreciate your consideration of these worthwhile projects in your deliberations.

TILLIE K. FOWLER
4TH DISTRICT, FLORIDA
Deputy Majority Whip
Republican Steering Committee

National Security Committee
JBCOMMITTEE ON MILITARY READINESS
(Vice-Chairman)
Subcommittee on Military Installations
and Facilities

Transportation and
Infrastructure Committee
Subcommittee on Coast Guard
and Maritime Transportation
(Vice-Chairman)
Subcommittee on Surface Transportation

Congress of the United States
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FY97 Energy and Water Appropriations Requests Fourth Congressional District of Florida

GENERAL INVESTIGATIONS

Nassau County Shore Protection - $400,000

This shore protection project is located on the Atlantic Shorefront of Amelia Island. The project provides for an initial fill of 3.6 miles of shoreline and periodic nourishment of 4.3 miles. FY97 funds will be used to complete a draft general reevaluation report. The project was authorized in WRDA 1988.

Jacksonville Harbor - $246,000

The existing depth of the Jacksonville Harbor is 38 feet. Currently, larger vessels must light load instead of using the full cargo capacity when entering this port. This Feasibility Study will investigate increasing the depth and width to between 40 to 44 feet in order to accommodate the larger commercial and bulk vessels. This was authorized by committee resolution.

Ponce de Leon - $112,000

This Feasibility Study is examining ways to improve the unstable nature of this navigation channel. The Coast Guard is frequently called to this channel to respond to groundings and to relocate aides to navigation. The annual dredging costs and northward migration of the channel have led to this study to determine alternatives to this unstable condition. This was authorized by committee resolution.

Chicopit Bay - $150,000

Chicopit Bay is located at the southern juncture of the St. Johns River and the Intercoastal waterway. Shoaling has put severe restrictions on navigation and has been attributed in part to federal maintenance of the Jacksonville Harbor. These funds would be used to initiate and complete a reconnaissance report. A study resolution is under consideration by the Transportation Committee and is expected to be approved prior to enactment of this FY97 appropriations bill.

Christopher Creek - $100,000

This project is to address storm water flooding into Christopher Creek in Jacksonville. This dollar amount will fund a recognizance study to determine how best to address this flooding. The project is authorized as a Section 205 small, flood project.

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CONSTRUCTION

St. Augustine Beach - $300,000

This project provides for restoration of a protective beach to a width of 80 feet at 12 feet elevation relative to mean low water. Erosion in this area has put many homes at risk and must be addressed. FY97 funds will be used to complete a draft GRR. This project was authorized in WRDA 1990.

Palm Valley Bridge - $600,000

This is a federal bridge over the Intercoastal Waterway in St. Johns County. The current bridge is a narrow two lane bascule bridge that serves as a hurricane evacuation route. Currently, large vehicles, such as school buses, must stop on either side of the bridge to let the other traffic pass. The authorization for this was contained in WRDA 94. It is included in the Senate version of WRDA 96 and is expected to be in the House WRDA as well.

Spanish Pond - $100,000

Spanish Pond is part of the Fort Caroline Memorial Park and consists of 15 acres of freshwater wetlands. The project includes construction of an outlet to control flooding to adjacent homes and roadways. This project qualifies as a Section 205 Continuing Authority project.

Wills Branch - $65,000

This project is subject to severe flooding due to inadequate openings under bridges crossing the Cedar River. This funding amount will allow for initiation of construction to enlarge the existing channel and provide an effective level of flood protection. Wills Branch is a Section 205 project.

OPERATION AND MAINTENANCE

Fernandina Harbor - $1.848m.

This WRDA authorized project provides for maintenance and construction dredging of the Fernandina Harbor and King's Bay Entrance Channel. This dredge material is then placed on nearby Amelia Island beaches.

Jacksonville Harbor - $7m.

Jacksonville Harbor is a commercial deep draft navigation project subject to significant shoaling. Maintenance of this harbor is crucial to allow large container and cargo ships to have access to this port. This dollar amount will allow the Corps to dredge to a depth sufficient enough to still accommodate these large commercial vessels even after the occurrence of some shoaling. The inability to dredge to this extra depth results in portions of the channel being more shallow than others and results in container ships having to light load in order to enter the port.

Ponce de Leon - $113,000

This navigation channel is subject to significant shoaling which causes frequent groundings. Dredging is necessary to ensure safe passage through this channel.

St. Augustine Harbor - $10,000

This minimum amount will allow completion of last year's dredging project in this Harbor. In addition to the significant navigation benefits form this maintenance dredging, the area is also benefited from the placement of this dredge material on St. Augustine Beach.

WEDNESDAY, FEBRUARY 28, 1996.

FLORIDA PROJECTS

WITNESS

HON. CARRIE P. MEEK, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. KNOLLENBERG. Mr. Young.

Mr. YOUNG. Mr. Chairman, again thank you very much, and I would like now to introduce the distinguished gentlelady from the southern part of our great State, Carrie Meek.

Mrs. MEEK. Thank you very much. It is a pleasure being back. This is my committee. I say it over and over. This is my committee. I served on this subcommittee——

Mr. BEVILL. We are saving a seat for you.

Mrs. MEEK. I served on this committee for the first two terms I was here, and I enjoyed it extremely well.

I came today to speak on behalf—and Mr. Bevill took real good care of me, Mr. Chairman, so it is a pleasure.

I just want to talk about a few things that are of great importance to Dade County. And they are very important because Dade County is a very unique county, Mr. Chairman. It is a multiethnic city with great diversity and, of course, great needs. And water is really what makes us what we are.

I want to thank you for including language in the conference report in the fiscal year 1996 bill which enabled the Corps of Engineers to initiate the preliminary work that has to be done on the Dade County wastewater reuse facility. We thank you very much for that.

High-quality water, I don't need to talk a lot about that. I will submit, with your approval, my testimony for the record. And I will be trying to make this short.

The reuse facility has helped us so much in Dade County. You know we have a lot of canals in Dade County, and this waste reuse facility that you funded will be of great help.

I would like to ask the committee to consider providing $500,000 in fiscal year 1997 to enable the Army Corps of Engineers to complete the reconnaissance survey and begin the feasibility study for this important project.

Miami Harbor needs major construction, dredging. That has been a problem since I was on this committee. We had dredging problems in Dade County, and this committee would fund what it took to get the water there, to get everything there, but it is all of these deposits that are at the bottom of the Miami River and other places of interest that are of interest in Dade County.

The Port of Miami has sprung up as a really important port. It is important because of its economic benefits as well as—particularly it is important in job benefits, as well as the services that they are rendering to the citizens there.

Miami is a big international trade center, and it is growing as a very large business center. I think we are perhaps the third largest cargo facility in the whole country. We have about $6 billion in commerce in the Port of Miami. Regrettably, we really need—you have already helped us, but I am asking for you to give us more support for the dredging.

The Seaport Department has been front-funding this process, and my staff has already talked to your staff. Pursuant to the Army Corps of Engineers' Section 204 reimbursement program, the Seaport Department is currently in the final stage of this dredging project, which will cost, in total, $50 million, of which $32 million is the Federal share.

Regrettably, only $1 million was appropriated in fiscal year 1996 for this purpose. However, the port will expend $15 million in fiscal year, or $10 million of the Federal share of the work. For fiscal year 1997, the port will expend another $10 million of the Federal share.

I have spoken with the Corps of Engineers officials, and I am meeting with Assistant Secretary Lancaster about the matter, and I have joined the entire Dade County congressional delegation to request $9 million in reprogrammed funds to support this necessary dredging program.

You will note, Mr. Chairman, that our congressional delegation—like most of the others, we work very well together. There are not many of us. There are just three Representatives—Ileana Ros-Lehtinen and Lincoln Diaz-Balart and myself. We served together in the legislature. We know each other very well. We perhaps know how each other thinks. But we work together on all of our projects, and this dredging project is very important to us.

I would like to ask the committee's continued support of the Department of Energy's Office of Science and Technology so that my Florida International University's Hemispheric Center for Environmental Technology can continue to foster the development and use of sustainable technologies. The last time this was considered—naturally we have gone through the Energy Department and it would certainly be funded at FIU.

FIU is a public university. It is in Miami. It is a member of the State university system. It is a majority minority institution, giving services to all of the multiethnic community. They have an enrollment of 28,000 students.

This represents a partnership. They are doing this with other universities, between DOE and FIU, to increase the use of environmental technologies.

I will end it, Mr. Chairman. I am going to submit—I don't want to end it without your knowing what our needs are, and I will go further and stress the importance of this FIU program. They have a consortium there that will bring the universities together meeting in this area of environmental technology. They have a good track record, and they do deserve continued funding.

And the third problem is the restoration of the Everglades. You probably don't want to hear any more, but I must tell you what Florida's needs are.

We have a restoration problem, as we have always had. Since I have been here, and before, the Florida delegation has always worked on the Everglades; but we need some flood control in south Dade County, and you were on the forefront of this long before I got here to trying to keep the Florida Everglades a viable source of water for Florida.

It is really a unique national resource. A national park is there. But the point I want to make is that it provides every drop of drinking water for south Florida. It is so important that we not only provide that, but it feeds Florida Bay. You have heard this argument so many times, and you know that is the incubator for the huge commercial and sports fisheries in south Florida and the Gulf of Mexico. That is what Florida Bay is, and that is how important the Everglades are to Florida's drinking water and its water system.

I urge the committee to consider funding of 7 million for Everglades restoration and 20 million for the restoration of the Kissimmee River that was on my sheet every year when I was here, that flows into Lake Okeechobee at the northernmost point of the Everglades.

I also ask for $4.8 million funding for improvements in the C–111. That is a canal flood control project which is crucial to the well-being of my constituents in south Dade County.

I keep in close touch with the Army Corps of Engineers, and they keep me abreast of what the needs are, and I go out and see; and I think that our requests, which may be fairly large, Mr. Chairman, are needed very much. I thank you and the committee for the time you have given me.

Mr. KNOLLENBERG. Do you have written testimony by the way? We would like to have——

Mrs. MEEK. Mr. Chairman, may I interrupt once more?

I forgot, I am so leaning toward my two friends, Ileana and Lincoln, I forgot to mention a man. Even when I was on the committee, he was the first one to bring me the needs of south Florida, and that was Congressman Shaw. He is the one that fed us—see, I was a freshman and he fed me all the stuff and made me hate those exotic plants. He kept bugging me about that until I became knowledgeable. And Alcee Hastings and Peter Deutsch. Thank you.

Mr. KNOLLENBERG. Thank you. We don't have any advance copy of your testimony. Make sure that we get that to include in the record. At least I don't have it.

Mrs. MEEK. I feel so strongly about this, Mr. Chairman. I think I should leave you my testimony.

Mr. YOUNG. Mr. Chairman, we will provide copies of each Member's written statement for your record.

[The statement of Mrs. Meek follows:]

Mr. Chairman, thank you for the opportunity to appear before you today. As a former member of the subcommittee, this is like coming home for me. Hopefully, I will be able to rejoin you as a member sometime in the future.

I want to take just a brief moment to give my warmest regards to the distinguished ranking minority member, Mr. Bevill. When I was a freshman on the subcommittee, Mr. Bevill was so kind and helpful to me. He didn't have to do that, but he did. I quickly learned how much the other Members on both sides of the isle looked up to Mr. Bevill, and I very much value your friendship and honor your service to our country. I am sorry to see you go.

I want to discuss a few issues of importance to Dade County, where my Congressional District is located, and to all of the state of Florida.

DADE COUNTY WATER REUSE FACILITY

First, Mr. Chairman, thank you for including language in the conference report accompanying the FY '96 bill which enables the Army Corps of Engineers to initiate the preliminary work on the proposed Dade County wastewater reuse facility.

The high quality of the water which will be produced by this reuse facility will help satisfy the natural systems and agricultural demands of Dade county by augmenting canal system water levels, improving protection against salt water intrusion, replacing the potable water currently used for irrigation and help restore the natural water flows of the Everglades system.

I would like to ask the committee to consider provided $500,000 in Fiscal Year 1997 to enable the Army Corps of Engineers to complete the reconnaissance survey and begin the feasibility study for this important project.

MIAMI HARBOR CONSTRUCTION DREDGING

The Port of Miami has acted as a catalyst for Florida's emergence as one of America's most important international trading and business centers. Goods and commodities moving through Miami account for over six billion dollars in commerce. The Port of Miami is also the world's largest cruise ship port, serving as the gateway for over 2 million cruise ship passengers annually.

To accommodate the rapid increase in cargo movements through the Port, dredging of the main ship channel is crucially needed. In order to expedite the dredging, the Seaport Department has been front-funding this project, pursuant to the Army Corps of Engineers' Section 204 reimbursement program. The Seaport Department is currently in the final stage of the dredging project, which will cost in total about $50 million, of which $32 million is the federal share.

Regrettably, only $1 million was appropriated in Fiscal Year 1996 for this purpose. However, the Port will expend $15 million this fiscal year, or $10 million of the federal share of the work. For Fiscal Year 1997, the Port will expend another $10 million of the federal share.

I have spoken with Corps of Engineers officials; I am meeting with Assistant Secretary Lancaster about the matter; and I have joined the entire Dade County Congressional delegation to request $9 million in reprogrammed funds for Fiscal Year 1996 to support this necessary dredging program. I would like to insert at this point in the record a copy of our correspondence for your review.

I would appreciate the committee's support and help in securing these reprogrammed funds.

In addition, I am requesting that $10 million be included within the Fiscal Year 1997 Energy and Water Development Appropriations bill. This is the total amount of the federal share of the work which will be front-funded by the Seaport Department in Fiscal Year 1997.

FLORIDA INTERNATIONAL UNIVERSITY'S HEMISPHERIC CENTER FOR ENVIRONMENTAL TECHNOLOGY

Mr. Chairman, I ask the committee's continued support for the Department of Energy's Office of Science and Technology so that Florida International University's exceptional Hemispheric

Center for Environmental Technology can continue to foster the development and use of sustainable technologies to preserve the environment and encourage economic development.

Florida International University is a public university located in Miami and is a member of the State of Florida University system. It is a majority minority institution with an enrollment of over 28,000 students.

H-CET represents a new partnership between DOE and FIU which is working to increase the use of environmental technologies by marketing them to the commercial sector. H-CET serves as the conduit to increase the flow of technologies developed by researchers at FIU, DOE and the private sector to the nations of the Americas. H-CET's work will promote mutual economic benefit and sustainable development in the U.S. and in Latin America.

The Department of Energy's Office of Science and Technology partnership with FIU also enhances and improves U.S. competitiveness in the global environmental technology market. H-CET is an inexpensive and efficient way to transfer and commercialize technology.

FIU's H-CET provides DOe with:

1) exposure in the global marketplace with an emphasis on the Americas;

2) a way to reduce costs, reduce risk and offset DOE's research and development expenses;

3) A site for technology demonstrations and a credible reporting capability; and

4) A broker of environmental technology with the ultimate goal of making it available for commercial use.

A recent H-CET success story is the Nitrate to Ammonia and Ceramic (NAC) project, which provides DOE with a technology for converting nuclear waste materials into self-contained, environmentally safe products for disposal. NAC will be used primarily for the elimination of sodium nitrate-based low level liquid waste at several national laboratories.

H-CET will broaden the U.S> environmental industry's opportunities to market its exports in the Americas. I strongly urge the committee to continue its support of the Office of Science and Technology, which makes this program possible.

EVERGLADES RESTORATION, SOUTH DADE FLOOD CONTROL

Finally, Mr. Chairman, I would like to ask for your continued assistance for restoration of the Florida Everglades and for flood control in South Florida.

This committee has for years been in the forefront of efforts to restore the Florida Everglades, a unique national resource which is not only provides every drop of drinking water in South Florida, but also feeds Florida Bay, the incubator for the huge commercial and sport fisheries in South Florida and the Gulf of Mexico.

I urge the committee to consider funding of $7 million for Everglades restoration and $20 million for the restoration of the Kissimmee River, which flows into Lake Okeechobee at the northernmost point of the Everglades.

I also ask for $4.8 million in funding for improvements in the C-111 Canal Flood Control Project, which is so crucial to the well-being of my constituents in South Dade County.

Mr. Chairman, I appreciate your consideration of these requests and look forward to working with you in the coming months.

WEDNESDAY, FEBRUARY 28, 1996.

FLORIDA PROJECTS

WITNESS

HON. MARK FOLEY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. YOUNG. And next I would like to introduce Congressman Mark Foley from that same part of the State that Carrie Meek represents.

Mr. FOLEY. Thank you very much, Mr. Chairman. We are ganging upon you from southeastern Florida.

I want to speak specifically on three projects. One is the St. Lucie River initiative. Many of you may have remembered a group of well-meaning citizens coming before you and providing you with this very important brochure, which I will submit for the record. It talks about a project that is of significant environmental importance for our communities.

First of all, to give you a background, the St. Lucie River is one of the Treasure Coast's most valuable natural resources. The river is the largest tributary to the Indian River Lagoon, which the EPA designated to the National Estuary Program a few years ago.

It was once a vibrant, beautiful body of water and inhabited with diverse species of plant and wildlife, but years ago the Federal Government constructed canals and dams and other things in order to change the flow patterns of waters coming from the Everglades, to the Everglades from Lake Okeechobee and other areas. We released water to tide. The water goes out into the intercoastal waterways and does serious degradation to the inland waterways system.

It has created a tremendous imbalance in the natural flow and the natural level of water. It has provided a lot of what is called "ooze"; it is a very, very thick substance, runoff from our agricultural lands and others. And the Corps of Engineers—in 1991, the Congress ordered the Corps of Engineers to reevaluate the Central and South Flood Control Project as part of the restoration of the Everglades.

In its reconnaissance report to Congress, the Corps reported potential solutions for the recovery of the St. Lucie River Estuary and the Indian River lagoon. One of the proposals calls for acquiring land and building regional attenuation facilities designed to retain the stormwater which is polluting the river. Researchers at the University of Florida estimate this proposal will bring a net gain of more than $350 million a year to south Florida's economy.

I am very impressed with the efforts of the local community. They have stood solidly behind this project and have illuminated the problems caused by the Federal Government's earlier flood control projects. The Corps must now conduct a feasibility study to determine the best way to restore the St. Lucie.

It disturbs me that while the Army Corps of Engineers, the EPA, the South Florida Water Management District, and various other Federal and State agencies have already spent millions to study the problem, this feasibility study that now is being required by the same Corps of Engineers could take upwards of five years, meaning construction would not be available until after the year 2000.

That now seems to be a tremendous delay in a project that everybody has identified, knows about, understands, and now is being held up and put on the back burner, waiting for yet another Federal study.

I understand there are official procedures and policies that must be followed, but I hope that there is some way that the Corps can expedite this process to prevent the further degradation of the St. Lucie. I ask the subcommittee's recognition of the need for a solution. I ask those interested to come to our office and see if we can short-circuit an additional five-year study.

Next, I would like to discuss the Ft. Pierce Beach Shore Protection Project. Again, I have written testimony.

The county is requesting $3.3 million for the Ft. Pierce Beach Shore Protection Project, which encompasses 1.3 miles of beachfront south of the federally maintained navigational inlet in Ft. Pierce Harbor. The county is also requesting $200,000 in construction funds for a general reevaluation report to expand the project length from 1.3 miles to 2.3 miles and $100,000 for a reconnaissance study of the southernmost county shoreline impacted by the Federal inlet.

Last year the subcommittee found it appropriate to include report language in the appropriations bill urging the Corps to expedite the final approval of the 934 study. However, the Senate removed this language during conference.

St. Lucie County has worked in partnership with the State of Florida and the Army Corps of Engineers since the 1960s to restore and maintain this beach. As a direct result of the Ft. Pierce Harbor Project, beach erosion has severely diminished the shoreline at least 2.3 miles south of the inlet.

A 934 study was initiated to extend the timeframe of Federal responsibility to 50 years. The 934 study was initiated nearly four years ago and is still awaiting the official approval from the Corps, which has been delayed by the administration's proposed policy concerning Federal participation in new beach renourishment projects.

The county decided to expend $250,000 of nonreimbursable funds years before the administration's proposed policy, on behalf of the Corps, to expedite the beach's renourishment project. I want to reiterate, the county has voluntarily spent $250,000 of its own, which will not be reimbursed.

While the administration has initiated a proposed policy with regard to the government's role in new beach renourishment projects, I must again emphasize this has been an ongoing project. I hope that the Corps will approve the 934 study and move forward.

I would now like to discuss the port of Ft. Pierce. By way of background, the Army Corps of Engineers recently completed dredging in Ft. Pierce in September 1995. The port's current dimensions are 28 feet deep with a 250-foot-wide channel. The port was deepened to 28 feet as a result of the 1984 feasibility study conducted by the Corps. Today a minimum depth of 32 feet is necessary to accommodate the increasing demand for Florida citrus products internationally.

The counties in the area, which include St. Lucie, Indian River and Martin Counties, have 228,000 acres of citrus, one-third of the Florida crop, with a $2 billion direct and indirect economic impact. St. Lucie County is the top citrus-producing county in Florida. Therefore, exporters are faced with significant costs of shipping products from ports not readily accessible to the region.

Deepening the channel would greatly enhance the exporting capability in the region and have an enormous positive impact on the local and State economy. It could expand shipment to an estimated 1 million tons annually. According to the 1991 economic development report, this could bring an additional 386 jobs, $8.3 million in wages, and $27 million in output to the area. In would clearly strengthen St. Lucie County's economy, which has had the third highest unemployment in Florida, at 16 percent, since 1995.

In the next couple of weeks, the House Transportation and Infrastructure Committee will be considering a survey resolution to authorize this project. Pending action by the authorizing committee, I would request $150,000 for a reconnaissance study, the general amount needed by the Corps of Engineers to begin the first phase of this project. As I have illustrated, deepening the port would enhance the city's ability to export products to foreign markets.

Finally, I am also submitting written testimony from County Commission Chairman Ken Foster on behalf of Palm Beach County for the Jupiter/Carlin Shore Protection Project and a request by the State of Florida for $750,000 to continue the second phase of the coast of Florida erosion and storm effects study. Each of these projects is critical to District 16's continued economic development and preservation of our pristine environment.

I thank the subcommittee and its Chairman for their attention.

[The statement of Mr. Foley follows:]

Testimony of

The Honorable Mark Foley

before the

Subcommittee on Energy and Water

House Committee on Appropriations

February 28, 1996

Mr. Chairman, I appreciate the invitation to appear before your Subcommittee today to address several of the important water and beach renourishment projects in the Sixteenth Congressional District of Florida. To be concise, I have limited my testimony to 3 projects which are vital to the economic health of our state and local communities.

ST. LUCIE RIVER INITIATIVE

The St. Lucie River is one of the Treasure Coast's most valuable natural resources. This river is the largest tributary to the Indian River Lagoon, which the Environmental Protection Agency designated to the National Estuary Program a few years ago. This estuary system is supported by a natural drainage system of creeks and wetlands in Central Martin and Southern St. Lucie Counties.

Once a beautifully vibrant body of water and habitat for a diverse species of plant and wildlife, the St. Lucie River today has succumbed to severe physical damage and habitat degradation. The gradual decline is attributed to federally built canals which drain into the St. Lucie River and the Indian River Lagoon. During the early part of this century, the C-44 Canal was built from Lake Okeechobee to the St. Lucie River.

This canal drained western Martin County and allowed excess drainage through Lake Okeechobee to be diverted through the St. Lucie Estuary to the Atlantic Ocean. Later, the C-23 and C-24 canals were built to drain more lands in western Martin and St. Lucie counties. I have attached maps of the St. Lucie River and these canals for the Subcommittee's review.

These federally built canals disrupted the natural flow of water into the River, in some instances dumping up to 10 times the harmful levels of fresh water and sediments into the fragile estuary. The rapid changes in salinity levels has produced an accumulation of sediments and flocculent ooze on the bottom of the River that has essentially destroyed the marine ecosystem. Over the years, the community has thus witnessed the harmful affects this has had on the seagrass, oysters, manatees and many species of fish which were once abundant throughout the River.

In 1991, Congress ordered the Army Corps of Engineers to reevaluate the Central and South Florida Flood Control Project, as part of the restoration of the Florida Everglades. In its Reconnaissance Report to Congress, the Corps reported potential solutions for the recovery of the St. Lucie Estuary and the Indian River Lagoon. One of the proposals calls for acquiring land and building regional attenuation facilities designed to retain the stormwater which is polluting the River. Researchers at the University of Florida estimate this proposal will bring a net gain of more than $350 million a year to South Florida's economy.

I am very impressed by the dedication and local support this project has received from the community. Many of you may recall, representatives from the St. Lucie River Initiative, a group of public and private entities committed to saving the River, came to Washington last fall documenting the River's critical condition and supporting this proposal as the most viable solution for its recovery.

The Corps must now conduct a feasibility study to determine the best way to restore and protect the St. Lucie River. It disturbs me that while the Army Corps of Engineers, the Environmental Protection Agency, the South Florida Water Management District and various other federal and state agencies have already spent millions of taxpayer dollars to study this problem, the Feasibility Study to determine the solution is still expected to take years. This means actual construction would not begin until well beyond the year 2000.

It doesn't surprise me that we have to undertake another bureaucratic maze before we can actually begin the restoration process, because that's the way Washington works. But the citizens of St. Lucie and Martin counties who have devoted countless hours to this project are tired of waiting. The River's decline will only worsen as we wait for yet another study to be completed. In the meantime, the local community will continue to suffer a financial and environmental loss.

I understand there are official procedures and policies that must be followed, but I hope there is some way the Corps can expedite this process to prevent the further degradation of the St. Lucie River. I ask the Subcommittee's consideration in recognizing the need for a solution today, not years of more studies.

FT. PIERCE BEACH SHORE PROTECTION PROJECT

Next, I would like to discuss the Fort Pierce Beach located in St. Lucie County and submit a written statement for this project on behalf of the St. Lucie County Commission. The County has requested $3.3 million for the Ft. Pierce Shore Protection Project which encompasses 1.3 miles of beachfront south of the federally maintained navigation inlet in the Fort Pierce Harbor. The County is also requesting $200,000 in construction funds for a General Reevaluation Report to expand the project length from 1.3 miles to 2.3 miles and $100,000 for a Reconnaissance study of the southern most County shoreline which is also impacted by the inlet.

Last year, this Subcommittee found it appropriate to include report language in the Appropriations bill urging the Corps to expedite the final approval of the 934 Study. However, the Senate removed this language during Conference. As you may recall, St. Lucie County has worked in partnership with the State of Florida and the Army Corps of Engineers since the 1960's to restore and maintain this beach. As a direct result of the Fort Pierce Harbor federal project, beach erosion has severely diminished the shoreline at least 2.3 miles south of the Inlet. Therefore, a 934 Study was initiated to extend the time frame of federal responsibility to 50 years.

The 934 Study was initiated nearly 4 years ago and is still waiting for the official approval from the Corps, which has been delayed because of the Administration's proposed policy concerning federal participation in new beach renourishment projects. The County decided to expend $250,000 of nonreimbursable funds, years before the Administration's proposed policy, on behalf of the Corps to expedite the beach renourishment project.

I want to reiterate that the County has voluntarily spent a quarter of a million dollars of its own funds on this project which will not be reimbursed. While the Administration has initiated a proposed policy with regards to the federal government's role in new beach renourishment projects, I must again emphasize that this has been an ongoing project and I am hopeful the Corps will approve the 934 Study and move forward on this project.

PORT OF FT. PIERCE

I would now like to discuss the Port of Fort Pierce. By way of background, the Army Corps of Engineers recently completed dredging in the Port of Ft. Pierce in September, 1995. The Port's current dimensions are 28 feet deep with a 250 foot wide channel. The Port was deepened to 28 feet as the result of a 1984 Feasibility Report conducted by the Corps.

Today, however, a minimum depth of 32 feet for the Port of Ft. Pierce is necessary to accommodate the increasing demand for Florida citrus products internationally. The counties in the area, which include St. Lucie, Indian River and Martin Counties, have 228,000 acres of citrus, one third of the Florida crop, with a $2 billion direct and indirect economic impact. St. Lucie County is now the top citrus producing county in Florida.

Therefore, exporters are faced with significant costs of shipping products from ports not readily accessible to the region. Deepening the channel at the Port of Ft. Pierce would greatly enhance the exporting capability in the region and have an enormous positive impact on the local and state economy. In fact, it could expand shipment to an estimated one million tons annually. According to a 1991 Economic Development Analysis for the Port of Ft. Pierce, this could bring an additional 386 jobs, $8.3 million in wages and $27 million in output to the area. This would clearly strengthen St. Lucie County's economy, which had the third highest unemployment rate in Florida at 16 percent for September, 1995 -- three times the state average.

In the next couple of weeks, the House Transportation and Infrastructure Committee will be considering a survey resolution to authorize this project. Pending action by the authorizing Committee, I would like to request $150,000 for a Reconnaissance Study, the general amount needed by the Army Corps to begin the first phase of this project.

As I have illustrated, deepening the Port of Ft. Pierce would greatly enhance the city's ability to export products to expanding foreign markets. I have enclosed letters of support and relevant information on this project with my testimony.

Finally, I am also submitting written testimony from County Commissioner Ken Foster on behalf of Palm Beach County for the Jupiter/Carlin Shore Protection project and a request by the State of Florida for $750,000 to continue the second phase of the Coast of Florida Erosion and Storm Effects Study.

Mr. Chairman, it is my hope the Subcommittee will find favor with the projects I have discussed. Each of these projects are critical to District Sixteen's continued economic development and the preservation of our pristine environment. I want to thank the Subcommittee for your previous consideration last year and respectfully request your continued support for full funding for these projects. Thank you very much.

Mark Foley
Sixteenth Congressional District of Florida
FY97 Energy and Water Subcommittee Appropriations Requests

Project	Funding Request	
1. Fort Pierce Beach Shore Protection	$3,304,800	(Construction)
	$200,000	(GRR)
	$100,000	(Reconnaissance Study)
2. Port of Ft. Pierce	$150,000	(Reconnaissance Study)
3. Coast of Florida Erosion and Storm Effects Study	$750,000	

Key

GRR: General Reevaluation Report

St. Lucie River Initiative

The St. Lucie River, the largest tributary to the Indian River Lagoon, has experienced severe deterioration and habitat degradation due to federally built canals which drain into the River. These canals disrupt the natural flow of water into the River, in some instances dumping up to 10 times the harmful level of fresh water and sediments into the estuary. The rapid changes in salinity levels has produced an accumulation of sediments and flocculent ooze on the bottom of the River that has destroyed the marine ecosystem. The Corps is beginning a Feasibility Study to determine the best way to restore and protect the St. Lucie River. It is critical that the Corps expedite this process to prevent further financial and environmental loss to the community.

Fort Pierce Beach Shore Protection Project

Funding Request:	$3,304,8000 (Construction)
	$200,000 (General Reevaluation Report)
	$100,000 (Reconnaissance Study)

It is also critical that the Corps promptly approves the 934 Study for Fort Pierce Beach. This study, which was initiated nearly 4 years ago, would extend the time frame of federal responsibility for the beach erosion impact South of the Fort Pierce Inlet to 50 years. Under the Corps recommendation, the County voluntarily expended $250,000 of its own money to expedite construction of this project. Without timely approval from the Corps, construction of the project will be further delayed. Once the 934 Study is officially approved, construction funds will be used to continue the Beach Protection Project; to begin a GRR to expand the project length from 1.3 to 2.3 miles; and to begin a Reconnaissance Study of the southern most County shoreline which has been impacted by the inlet.

Port of Fort Pierce

Funding Request: $150,000 (Reconnaissance Study)

The Army Corps of Engineers completed dredging in the port of Ft. Pierce in September, 1995. The Port's current dimensions are 28 feet deep with a 250 foot wide channel. The Port was deepened to 28 feet as a result of a 1984 Feasibility Report. Today, a minimum depth of 32 feet is necessary to accommodate the increasing demand for Florida citrus products internationally. Pending action by the authorizing Committee on a survey resolution to authorize this project, funds will be used to conduct a Reconnaissance Study to deepen the Port.

Coast of Florida Erosion and Storm Effects Study

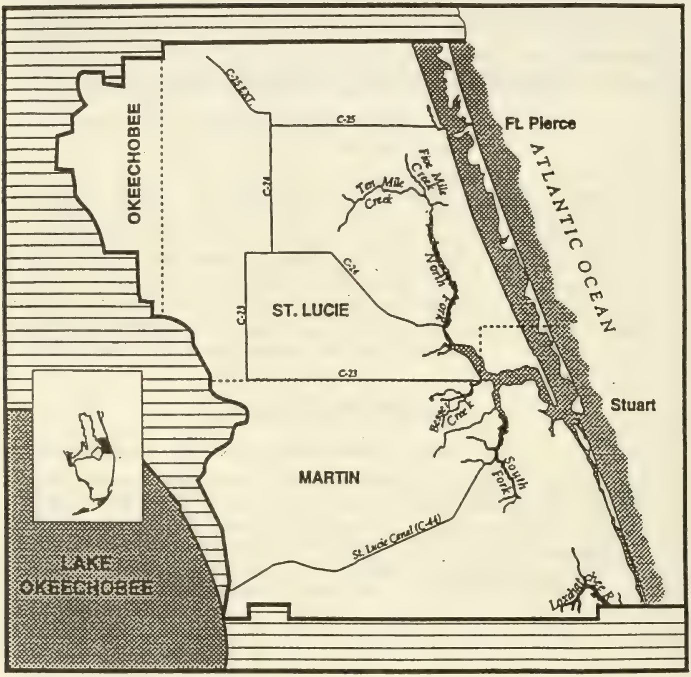
Funding Request: $750,000

The Coast of Florida Erosion and Storm Effects Study is a statewide study of the status and dynamics of coastal process affecting Florida's beaches. The Coast of Florida, which includes 800 miles of high-quality beaches, is an extremely valuable natural resource. The damage caused by hurricanes on Florida's central and northern coast in 1985 and 1996 and the lower east coast in 1992 validates the need for the study which provides information for coastal resource managements on a regional basis. The first phase of the study covered 92 miles of shoreline in Palm Beach, Broward and Dade counties. The second phase of the study is covering Martin, St. Lucie, Indian River and Brevard counties. There will be five phases in all.

REGIONAL ATTENUATION FACILITY TASK FORCE

STUDY AREA

MAP 1



Congress of the United States
Washington, DC 20515

December 18, 1995

The Honorable Bud Shuster
Chairman
Committee on Transportation and Infrastructure
2165 Rayburn HOB
Washington, D.C. 20515

Dear Chairman Shuster:

We are writing to request your Committee's consideration and adoption of a survey resolution to authorize a study for the deepening of the Port of Fort Pierce, Florida.

By way of background, the Army Corps of Engineers recently completed dredging in the Port of Ft. Pierce in September, 1995. The Port's current dimensions are 28 feet deep with a 250 foot wide channel. The Port was deepened to 28 feet as the result of a 1984 Feasibility Report conducted by the Corps.

Today, however, a minimum depth of 32 feet for the Port of Ft. Pierce is necessary to accommodate the increasing demand for Florida citrus products internationally. The counties in the area, which include St. Lucie, Indian River and Martin Counties, have 228,000 acres of citrus, one third of the Florida crop, with a $2 billion direct and indirect economic impact. St. Lucie County, where the Port of Ft. Pierce is located, is now the top citrus producing county in Florida. Over 500,000 tons, 80 percent of fresh citrus produced in this region, is exported to Europe and Japan. Most of this is within 20 miles of the Port of Ft. Pierce, however, only about 50,000 tons can be shipped from Ft. Pierce.

Therefore, exporters are faced with significant costs of shipping products from ports not readily accessible to the region. This requires trucking long distances which adds significant transportation costs, increases burdens on roads, increases fuel consumption and emissions, and reduces shelf life of perishable products. Deepening the channel at the Port of Ft. Pierce would greatly enhance the exporting capability in the region and have an enormous positive impact on the local and state economy.

Deepening the Port to 32 feet could expand shipment to an estimated one million tons annually. According to a 1991 Economic Development Analysis for the Port of Ft. Pierce, this could bring an additional 386 jobs, $8.3 million in wages and $27 million in output to the area. This would clearly strengthen St. Lucie County's economy, which had the third highest unemployment rate in Florida at 16 percent for September, 1995 -- three times the state average.

We respectfully urge your favorable consideration of a survey resolution for the Port of Ft. Pierce. As we have illustrated, deepening the Port of Ft. Pierce would greatly enhance the city's ability to export products to expanding foreign markets.

Thank you for your time and attention to this matter. Attached you will find a proposed survey resolution and correspondence from city officials and local businesses in support of this proposed project. If you need any additional information, do not hesitate to contact us directly.

Sincerely,

Connie Mack
Connie Mack
U.S. Senator

Bob Graham
Bob Graham
U.S. Senator

Mark Foley
Mark Foley
Member of Congress

Alcee L. Hastings
Alcee Hastings
Member of Congress

Congress of the United States

Washington, DC 20515

RESOLUTION

Resolved by the Committee on Transportation and Infrastructure of the United States House of Representatives, That the Secretary of the Army is requested to review the report of the Chief of Engineers dated 14 December 1984, as authorized in PL100-676, and other pertinent reports to determine whether modifications of the recommendations contained therein are advisable at the present time, with particular reference to providing channel dimensions in Fort Pierce Harbor, Florida in order to meet present and anticipated requirements of deep-draft commercial navigation.

ST. LUCIE COUNTY PORT AND AIRPORT AUTHORITY

RESOLUTION NO. 95-12

A RESOLUTION REQUESTING THE CONGRESS OF THE UNITED STATES TO ENABLE THE U.S. ARMY CORPS OF ENGINEERS TO DEEPEN THE PORT OF FORT PIERCE TO A DEPTH GREATER THAN THE CURRENTLY AUTHORIZED 28 FEET

Whereas, the St. Lucie County Port and Airport Authority has made the following determinations:

1. The Port of Fort Pierce is one of fourteen deep-water state ports so designated by Florida Statute 403.

2. The Port of Fort Pierce has been a federally maintained port since 1935.

3. The last increases in channel width and depth were made in 1938, resulting in an interior channel width of 200 feet and a depth of 25 feet.

4. Local interests petitioned the Congress of the United States in 1968 requesting improvements to the port.

5. In 1969 the Senate Public Works Committee authorized the U.S. Army Corps of Engineers to study the feasibility of making improvements to the Port of Fort Pierce and make recommendations based on the study.

6. The 1984 Corps of Engineers Feasibility Report concluded that deepening the port to 26 feet, 28 feet, 30 feet, 32 feet, 34 feet, or 36 feet are all economically feasible.

7. The 1984 Feasibility Report recommended a depth of 28 feet based on the highest cost-benefit ratio of the alternatives considered.

8. The 100th Congress in the 1988 Water Resources Development Act, Public Law 100-676, authorized the project recommended in the Feasibility Report.

9. The 1984 cost-benefit ratio was based on the movements of citrus and aragonite in the port. Cement is now a regularly imported commodity into a new waterfront facility.

10. The cost estimated by the Corps of Engineers in their 1994 Final Navigation Study to deepen the Port of Fort Pierce to 28 feet is $9,201,100.00, with a positive cost-benefit ratio of 1.8 to 1.

11. The majority of the contract for the Port of Fort Pierce Project has been awarded to Great Lakes Dredge and Dock Company. After the last contract item has been negotiated and awarded, the Corps of Engineers believes the total project cost will be well under the estimate.

12. The Notice to Proceed was issued on June 8, 1995 to Great Lakes Dredge and Dock Company by the Army Corps of Engineers.

13. The majority of the environmental impacts from the project will be caused by the widening of the channel, not the deepening.

14. The Corps of Engineers 1994 Navigation Study concludes that the citrus vessels using the port can be fully loaded with a 28 foot depth, but the aragonite vessels can only be loaded to 76% of capacity.

15. The cement vessels currently using the port require 34 feet of depth to fully load.

16. With deepening to 28 feet, the Port of Fort Pierce will continue to be the shallowest port on the east coast of Florida.

NOW, THEREFORE, BE IT RESOLVED by the St. Lucie County Port and Airport Authority, St. Lucie County, Florida:

1. This Authority believes that the Port of Fort Pierce should be deepened to a depth greater than 28 feet.

2. This Authority requests that after the contract with Great Lakes Dredge and Dock Company has been finalized and the cost savings determined, an analysis by the U.S. Army Corps of Engineers be made of what additional project depth can be accomplished using the savings.

3. This Authority petitions the Congress of the United States and the U.S. Army Corps of Engineers to take all necessary steps to allow the greater deepening of the channel while the impending work is performed so as to take advantage of resulting economies and to make the best possible use of all available Federal dollars.

After motion and second the vote on this Resolution was as follows:

Chairman Havert L. Fenn	Aye
Vice Chairman Gary D. Charles Sr.	Aye
Commissioner Denny Green	Aye
Commissioner Cliff Barnes	Absent
Commissioner Ken Sattler	Aye

PASSED AND DULY ADOPTED this 13th day of June, 1995.

ATTEST:

Sharon Bouton
DEPUTY CLERK

ST. LUCIE COUNTY PORT
& AIRPORT AUTHORITY
ST. LUCIE COUNTY, FLORIDA

BY: Havert L. Fenn
CHAIRMAN

APPROVED AS TO FORM AND
CORRECTNESS:

Asst COUNTY ATTORNEY

Board of County Commissioners

Ken L. Foster, Chairman
t Aaronson, Vice Chairman
n T. Marcus
ol A. Roberts
Warren H. Newell
Mary McCarty
Maude Ford Lee

County Administrator

Robert Weisman

TESTIMONY

TO: The Honorable John Myers, Chairman

BEFORE: The House Appropriations Subcommittee on Energy and Water

BY: Ken L. Foster, Chairman
Board of County Commissioners
Palm Beach County, Florida

MEETING: February 28, 1996

SUBJECT: $2,229,100 APPROPRIATION FOR JUPITER/CARLIN SEGMENT OF THE PALM BEACH COUNTY, FLORIDA, SHORE PROTECTION PROJECT

MR. CHAIRMAN:
I am Ken L. Foster, Chairman of the Board of County Commissioners of Palm Beach County, Florida, testifying on behalf of the Board of County Commissioners.

REQUEST:
I am requesting an appropriation of $2,229,100 to allow the Department of the Army to reimburse Palm Beach County for costs incurred to date and costs anticipated towards the completion of the initial construction of the Jupiter/Carlin segment of the Palm Beach County, Florida, Shore Protection Program.

AUTHORIZATION:
On March 21, 1995, Palm Beach County, Florida, entered into a Project Cooperation Agreement with the Department of the Army for construction of the Jupiter/Carlin segment of the Palm Beach County, Florida, Shore Protection Project. Section 103 of the Water Resources Development Act of 1986, Public Law 99-662, as amended, specifies the cost-sharing requirements applicable to the project. The project

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authorization allows for construction of the project by the non-federal sponsor (Palm Beach County with subsequent federal reimbursement. Costs associated with initial construction, surveillance and periodic nourishment for a ten (10) year period are eligible for federal cost-sharing under the approved agreement. A general design memorandum (GDM) was approved by the Assistant Secretary of the Army (Civil Works) on February 23, 1995.

PROJECT HISTORY:
The Jupiter/Carlin Shore Protection Project initial construction project was conducted in March and April 1995 in accordance with the federally approved GDM. The project transferred 513,000 cubic yards of sand from the ebb tidal shoal to approximately 1.1 miles of shoreline immediately south of the Jupiter Inlet in Jupiter, Florida. The initial phase of the project also includes construction of 2.1 acres of submerged hard bottom habitat as mitigation for project impacts.

PROJECT COST:
The total cost of the initial construction is approximately $4.1 million. Approximately $3.25 million has been expended by Palm Beach County to date. Approximately $1 million in state funding has been received. The federal percentage of the project costs (according to the Project Cooperation Agreement) is 65 percent of the total project costs assigned to hurricane and storm damage reduction and 50 percent of the separable costs of the project assigned by the Government to recreation. This translates to 54.7% of the eligible project costs. The $2.229 million requested for the initial construction is the federal share estimated in the GDM. Annual costs stemming from the project were calculated in the GDM to be $824,000. Actual costs are expected to be less. The requested appropriation is for initial construction funds that have been expended by Palm Beach County and anticipated future surveillance expenditures associated with the initial construction phase. It does not include future surveillance and periodic renourishment costs. The federal share of each future renourishment is estimated in the GDM to be $2.27 million.

PROJECT BENEFITS:
Beaches at the project site have experienced severe erosion and shoreline recession. The processes which generated this condition continue to degrade the beaches. The Jupiter/Carlin Shore Protection Project was designed to reduce storm induced damage, reestablish beaches suitable for recreational and sea turtle nesting activity, and help the local sponsor maintain an income base derived from tourism. The primary benefit of the project is to prevent storm damage and to stabilize the shoreline within the project limits. Sand placed within the project limits also feeds the downdrift beaches to the south. Annual benefits calculated using federal guidelines for storm damage prevention, loss of land prevention and recreational enhancement are $1.554,600. The benefit to cost ration is 1.9.

LOCAL SPONSOR EXPECTATIONS:

Palm Beach County, Florida, as local sponsor of this federally approved project, expects timely reimbursement in accordance with the described agreement with the Department of the Army. In order for the Department to honor its agreement, Congress must appropriate funds for this purpose. Palm Beach County has committed its own funds to achieve the required cost share for state and federal funding consideration, and has funded the initial construction of the project. Federal funds are needed to monitor and maintain the project for maximum public benefit. The County has a signed agreement with the federal government for funding and has proceeded with this project with the expectation of timely reimbursement. It would not be fair to the County to withhold funds for this project.

Ken L. Foster

Ken L. Foster, Chairman
Board of County Commissioners
Palm Beach County, Florida

TESTIMONY BEFORE HOUSE APPROPRIATIONS SUBCOMMITTEE ON ENERGY AND WATER, FEBRUARY 28, 1996

BOARD OF COUNTY COMMISSIONERS, ST. LUCIE COUNTY, FLORIDA

On behalf of St. Lucie County, Florida, we thank you for this opportunity to express the concerns of County residents and the County Commission relative to the adverse impacts of a federal navigation project and the need for federal assistance to mitigate these impacts.

St. Lucie County is located along the east coast of central Florida. Ft. Pierce Harbor is a federal navigation project which includes Ft. Pierce Inlet - located within the County. The navigation project has been maintained by the U.S. Army Corps of Engineers since 1935. A Section 111 Report was prepared by the Corps in 1982; this report cites that the inlet has caused 46 to 60 percent of the erosion over more than 2 miles of shoreline south of the inlet. Recent studies by the County indicate that virtually all of the erosion south of the inlet is attributable to the inlet. This erosion has resulted in the direct and continued loss of public and private property.

A 1.3 mile Shore Protection Project was authorized by Congress in 1965. Sand was placed on the beach south of the inlet in 1971 and 1981 under this authorization. The placed sand temporarily offset the adverse impacts of the inlet. The authorization expired in 1985. St. Lucie County requested re-authorization of the Shore Protection Project in 1988. Although the ensuing Section 934 Report concluded that federal participation is justified, re-authorization of the Shore Protection Project has been held in abeyance by the Administration's policy to withhold federal participation from "new" shore protection projects.

To fulfill immediate needs and fulfill federal responsibilities we request the following:

- $3,304,800 for construction of the justified 1.3 mile Shore Protection Project;
- $200,000 for a General Re-evaluation Report (GRR) to expand the project length and incorporate Section 111 provisions; and
- $100,000 for a Reconnaissance study of the southern most County shoreline.

Thank you, I'll also leave a written summary of our request, supporting background information and photographs depicting the continual shoreline erosion.

TESTIMONY BEFORE HOUSE APPROPRIATIONS SUBCOMMITTEE ON ENERGY AND WATER, FEBRUARY 28, 1996

BOARD OF COUNTY COMMISSIONERS, ST. LUCIE COUNTY, FLORIDA

SPECIFIC REQUEST

The following are specific requests by St. Lucie County, Florida:

1) Cost share funding for construction of the justified 1.3 mile shore protection project pursuant to the Section 934 Report (Revised May, 1995), Fort Pierce, Florida Shore Protection Project, in the amount of $3,304,800; and

2) Funding of a General Re-evaluation Report (GRR) for the Fort Pierce, Florida Shore Protection Project to expand the project length one (1) mile and incorporate the Section 111 provisions in the amount of $200,000; and

3) Funding of a Reconnaissance study for the southern most St. Lucie County, Florida shoreline in the amount of $100,000.

TESTIMONY BEFORE HOUSE APPROPRIATIONS SUBCOMMITTEE ON ENERGY AND WATER, FEBRUARY 28, 1996

BOARD OF COUNTY COMMISSIONERS, ST. LUCIE COUNTY, FLORIDA

FORT PIERCE, FLORIDA SHORE PROTECTION PROJECT BACKGROUND / HISTORY

Federal participation in the Fort Pierce, Florida Shore Protection Project (located in St. Lucie County, Florida) was authorized by the River and Harbor Act of 1965 and modified by Section 102 of the 1968 River and Harbor Act. The project encompasses 1.3 miles of beachfront south of the federally-maintained navigation inlet which permits access to and egress from the Fort Pierce Harbor. Initial construction of the shore protection project was completed in 1971, after the investment of $300,083 federal and $321,207 non-federal dollars.

In 1982, a Section 111 Detailed Project Report of the U.S. Army Corps of Engineers concluded that the federally-maintained inlet is responsible for 60 percent of the erosion of the first 6,800 feet of shoreline immediately south of the jetty (the 1.3 miles of the project) and 46 percent of the next 4,200 feet of shoreline. The erosive impact of this inlet is further well-documented in a final draft of the County's inlet management plan which identifies beach erosion impacts along the entire southern shoreline of the County.

The Corps began maintenance renourishment of the shore protection project in 1980. However, the project's authorization expired in 1985. By letter dated July 19, 1988, St. Lucie County (the local project sponsor) initially requested extension of federal participation in the project. Throughout the period since then, the County has been working with the Corps of Engineers to secure the reauthorization of the project under authority granted the Secretary by Section 934 of the Water Resources Development Act of 1986.

In October, 1993, the Jacksonville office of the Corps informed the County that it believed the first 1.3 miles of shoreline would be ready for construction in fiscal year 1996. During meetings held in January through April, 1994, the Corps stated that this schedule could be maintained only if the County undertook certain pre-construction tasks. As a result, the County is expending over a half million dollars of its own funds to conduct various studies including beach profiles, aerial photography, geotechnical investigations, environmental assessments, and other activities directly related to the preservation of its beachfront.

The Jacksonville District Office of the Corps sent a revised Section 934 Report to the Corps' national office in May, 1995. Subsequently, the Corps' national office approved the Section 934 report but stated that, given the Administration's policy to remove the Corps from all "new" beach nourishment projects, the Assistant Secretary of the Army for Civil Works will take no action to implement this Section 934 Report. Thus, the project will not be reauthorized by the Corps. The County has subsequently requested either that the Corps reverse its decision and approve the Section 934 Report or, in the alternative, that the project be authorized by Congress. The County has further requested federal funding of the previously authorized project as discussed in the Section 934 Report (May, 1995 revision). Finally, the County has requested that the Congress take such action as is necessary to direct the Corps to undertake and expeditiously complete a General Re-evaluation Report (GRR) to expand the project length of the previously authorized project (from 1.3 miles to 2.3 miles - which would encompass the additional 4,200 feet of shoreline referred to above) and incorporate Section 111 provisions. This GRR will also recommend an appropriate cost-sharing arrangement between the federal government and the local sponsor.

To date, the Senate Environment and Public Works Committee has adopted language as part of its Water Resources Development Act legislation (S. 640) that directs the Corps to proceed with nourishment of the original 1.3 mile segment of project. The County will be requesting an appropriation from Congress for fiscal 1997 which would permit the Corps to complete a GRR of the adjacent 1 mile of beachfront and to proceed with the necessary actions which will assure prompt construction of what the County expects will be the full 2.3 miles of this project. The County will also be requesting an appropriations for a Reconnaissance study of the southern most County shoreline which is also feeling the erosive impacts due to the inlet.

Mr. YOUNG. Mr. Chairman, at this point I would like to submit a statement from Congressman Joe Scarborough, who will not be able to be here, and I have provided copies to the staff.

Mr. KNOLLENBERG. So ordered.

[The statement of Mr. Scarborough follows:]

JOE SCARBOROUGH
1st District, Florida

NATIONAL SECURITY
COMMITTEE

GOVERNMENT REFORM AND
OVERSIGHT COMMITTEE

Congreſs of the United States
House of Representatives
Washington, DC 20515–0901

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(904) 664-1266

STATEMENT OF CONGRESSMAN JOE SCARBOROUGH BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON ENERGY AND WATER

FEBRUARY 28, 1996

Mr. Chairman and Members of the Subcommittee, I thank you for the opportunity to testify today in support of projects in the First Congressional District of Florida.

As you are aware, we have not had an opportunity to review the President's FY 1997 budget requests as the 1996 budget process is still unresolved. As a result of the lack of specific Administration requests, I would appreciate a chance to amend my statements after reviewing the Administration's budget request.

I am here today to ask for your support of an ongoing Army Corps project in Panama City, Florida. As you may recall, I submitted testimony before this subcommittee last year on behalf of this very important beach nourishment project which has been ongoing since the mid-1970s and was authorized in 1986.

I urge this Subcommittee to appropriate $33 million in the Corps' "Construction, General" budget for the Panama City beach nourishment project. This project, which was authorized by the Water Resources Development Act of 1986, is badly needed to repair erosion damage caused by federally-maintained inlets and made significantly worse by Hurricane Opal's severe damage last year I have been informed that a General Re-Evaluation Report (GRR) is currently awaiting the approval of the Assistant Secretary. My concern is that this project will get caught in the change in policy which this Administration has sought to impose mid-stream on shoreline protection projects that were already in the pipeline.

The delay in the completion of the GRR of the Panama City beach project has resulted in placing this project in jeopardy. Clearly, there are more than 16 miles of eroded beach which are causing economic hardship to the Bay County region as well as endangering the property which is adjacent to and upland from the beach. It is also clear to me that earlier decisions by the Corps' national office have been unfair in their allocation of the burden for repairing damage which has been caused in part by the existence of federally-maintained inlets for the Panama City Harbor. The Corps even requested that funds to determine the extent of this federal responsibility (known as a Section 111 report) were to come out of the total sum authorized for this project.

I have also been told that had the beach nourishment project been completed prior to Hurricane Opal, the federal government would be money ahead due to the protection that the beaches would have provided to structures on the coast.

I will be providing this Subcommittee with additional information about this project in the days ahead. For now, let me assure you that the funds I am requesting are based on the General Design Memorandum prepared by the Corps, a General Re-evaluation Report which I expect to be approved by the Assistant Secretary, and on the willingness of the local community to share its full fiscal responsibility as the local supporter of the project. May I also assure the Subcommittee that the funds I am requesting can and will be spent by the Corps if directed to do so by Congress.

I must also take this opportunity to express my concern over the Administration's position as is relates to beach nourishment projects. I am working with other Members in both Houses to address this problem. We are all aware of the importance of healthy, well maintained beaches to Florida and many of these beaches cannot be maintained without the assistance of the Army Corps of Engineers and the federal government.

Mr. Chairman, thank you again for the opportunity to submit testimony to the subcommittee. I appreciate your consideration of this very important project.

WEDNESDAY, FEBRUARY 28, 1996.

FLORIDA PROJECTS

WITNESS

HON. DAVE WELDON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

RALPH KENNEDY, PRESIDENT, PORT CANAVERAL PORT AUTHORITY

Mr. YOUNG. Now I am happy to introduce Congressman Dave Weldon from the Cape Canaveral and Kennedy Space Center area of our State, and at the completion of his statement he would like to introduce the chairman of the Canaveral Port Authority.

Mr. WELDON. Thank you, Congressman Young and Chairman and Members of the committee. It is a pleasure to be here to appear before you today, and I want to thank you for your support in the past for several vital projects, to include the sand bypass mitigation project at the port as well as the Brevard County storm damage prevention study. A number of these projects still need your attention.

I would like to draw your attention and submit for the record this photograph which shows the Port Canaveral inlet created by the Army Corps of Engineers many years ago. Forty years ago, before the Federal inlet, this beach to the north was about 100 yards further to the west. This beach to the south was about 100 yards further to the east.

It was just basically a straight line, and what has been going on for the past 40 years, the beaches to the south have lost about 16 million cubic yards of sand. About 8 million cubic yards has accumulated to the north, and 8 million cubic yards has been dredged and unfortunately dumped out at sea over the past years, rather than placed back on the beaches to the south for renourishment.

There is a littoral flow on the East Coast. The sand tends to flow from the north to the south, and this inlet has disrupted that normal flow.

I am requesting several items from the committee and I am submitting a more detailed testimony for the record, but I would like to briefly cover a few of the things. I am requesting $4 million for the completion of the initial sand bypass project at Port Canaveral that had been authorized and promised by the Corps back in 1962.

I am additionally requesting $500,000 to initiate the preconstruction and engineering design phase of a storm damage prevention project in Brevard County; $640,000 to correct the cost sharing of rock relocation along the north and south sides of the improved Canaveral channel; and $1.3 million for widening at the entrance to the channel for the safety of longer ships using the recently deepened navigational channel.

Today houses and hotels that once stood hundreds of feet from the ocean's shore are now having breaking waves right at their edge, and I would also like to submit for the record these photographs which show extensive real estate holdings amounting to billions of dollars that now are on the verge of tumbling into the ocean, and some of which have already tumbled into the ocean and have been condemned.

The problem caused by this erosion extends beyond the danger posed to the billions of dollars in construction along the shore. Brevard's beaches, which is the county that I am talking about, have the highest concentration of endangered sea turtles in North America. Each spring, thousands of sea turtles come on shore in Brevard County to lay their eggs on the beaches. It is for this reason that we must restore and protect these beaches.

The Federal Government has a responsibility to mitigate the damages caused by the federally constructed inlet at Canaveral. I would like to point out that this facility has multiple Federal users. Right here is the naval test range for ballistic missiles. This is where the naval submarines tie up. We additionally have a Coast Guard facility here, and this facility is also used by NASA. So, it is not only a commercial port but it is also extensively used by Federal agencies, so it is not only created by the Federal Government but it is the Federal Government that is using it.

First, let me just say the Federal Government must stop the erosion. The sand bypass project will address this. But, secondly, the Federal Government must mitigate damage caused since the construction of this inlet.

Completing the periodic sand bypass project begun in 1995, the Army Corps of Engineers actually began fulfilling commitments made in 1962 to periodically take sand that builds up on the north side of the jetty and transfer it to the south. This sand bypass project will mitigate any future damages. The $4 million request for FY 1997 will enable the Corps to complete the bypass project left incomplete in 1995. This funding will satisfy the Corps' 1962 commitment.

I would like to ask that the committee provide $500,000 to initiate the preconstruction and engineering design or PED phase of a storm damage prevention project in Brevard County. The Army Corps of Engineers will soon complete a study authorized in 1982. The project has a strong 1.7 to 1 benefit to cost ratio and is strongly supported by the local community.

The Corps would normally move to PED after the completion of the study. However, based on the administration's new policy regarding storm damage prevention projects, the continuation of the project will undoubtedly require specific guidance from this committee.

Mr. Chairman, at this time I would like to yield to Ralph Kennedy, the chairman of the Port Canaveral Board of Commissioners, to briefly present the additional request for $640,000 to correct the cost sharing of rock relocation, and the $1.3 million request for widening the entrance of the channel to accommodate longer ships that will soon be using the port.

[The statement of Mr. Weldon follows:]

Testimony of Congressman Dave Weldon (FL-15)
Before The
House Appropriations Subcommittee on
Energy and Water Development

February 28, 1996

Mr. Chairman and members of the Subcommittee, I appreciate this opportunity to update you about water projects in the 15th Congressional District of Florida.

I want to thank you and the Subcommittee for your past support for several vital projects especially those involving the economic development of Port Canaveral, the Sand Bypass Mitigation Project at the Port, and the Brevard County Storm Damage Prevention Study. A number of these projects still need your attention.

In summary, appropriations I am requesting include:

- $4 million for completion of the initial bypassing of sand at Port Canaveral - a project authorized since 1962 but which the Corps has failed to fulfill;
- $500,000 to initiate the Preconstruction and Engineering Design (PED) phase of a storm damage prevention project in Brevard County, Florida to mitigate damage caused by the federal navigation inlet;
- $640,000 to correct the cost sharing of rock relocation along the north and south sides of the improved navigation channel; and
- $1.3 million for widening at the entrance channel for the safety of the longer ships using the recently deepened navigation channel.

Port Canaveral Sand Transfer Project

I want to begin by asking your support for urgently needed funds to complete the initial sand bypassing work from the north side of the Canaveral navigational inlet to the shoreline south of the channel.

The problem stems from the digging of the Port Canaveral inlet by the United States Army Corps of Engineers in the 1950s. While the Port is a tremendous economic asset, for many years we neglected to address its adverse environmental side effects. Wave action normally moves sand from north to south along Florida's Atlantic coast. But, the port's inlet and jetties trap sand that would otherwise replenish the beaches to the south. This federally constructed inlet has resulted in severe erosion to beaches south of the inlet.

This erosion has enormous costs.

Over the 40-year history of the Port, we have lost approximately 14 million cubic yards of beach-grade sand. Using an estimate of $7 per cubic yard to replace sand on the beach, we would be talking about almost $98 million worth of sand lost to the beaches. Add to this the cost to taxpayers of $20 million -- currently $521,000 per year -- to dredge this sand from the channel and haul it out to sea. I am not suggesting that we restore the beach to this degree, but I say this to illustrate the magnitude of the problem.

Tourists and weekend visitors to these beaches spend about $1 billion a year. Eroded beaches mean fewer tourists and fewer dollars to this already economically strapped community.

There is also a national security issue. Shoaling in the Canaveral Channel is forcing restrictions on the operations of Trident submarines based there. I understand from the Navy that they currently have only a few hours of high tide to get submarines into and out of the Port.

After numerous studies over many years regarding various methods of sand bypassing, the Corps has settled on a two-phase approach. The first phase was to extend the existing jetty 500 feet and to sand tighten the entire jetty. This phase is complete and is working as designed. The second phase involves conventional dredging to bypass approximately 636,000 sand from beaches north of the jetty to beaches south of the jetty once every five or six years. A contract was awarded in 1994 to accomplish the bypassing. However, the work was not completed because the Corps miscalculated the amount of material needed to accomplish the work based on the nature of the sand being bypassed. The material was of a finer grain than the Corps had assumed. As a result, when the contractor completed the beach placement in April 1995, the sand only covered 8,000 feet instead of the 12,800 called for in the mitigation plan.

The issue of completing this work (the additional 4,800 feet) has been under review by Corps Headquarters and, based on a recent Chief Counsel legal opinion, the Corps has agreed that the remainder of the initial sand bypassing work can be accomplished. The work was scheduled for FY 1996 but had to be postponed until 1997 because of the sea turtle nesting season.

The $4,000,000 I am requesting will complete the initial sand bypassing work over the remaining 4,800 feet of beach.

Brevard County Storm Damage Prevention Project

I would ask that the Committee provide $500,000 to initiate the Preconstruction and Engineering Design (PED) phase of a storm damage prevention project in Brevard County. The Army Corps of Engineers will soon complete a study that was begun in 1982. The project has a strong 1.7 to 1 benefit-cost ratio and is strongly supported by the local community. The Corps would normally move to PED after the completion of the study. However, based on the Administration's new policy regarding storm damage prevention projects, the continuation of the project will undoubtedly require specific guidance from the Committee. We appreciate the strong support expressed by the Committee last year for projects of this type and ask that the $500,000 be included in 1997 for the Brevard County project.

A significant portion of this project is a mitigation effort to repair some of the damage done to the south beaches by the inlet. As early as the mid-1950s, the Corps identified adverse impacts the inlet was having on the south beaches. The federal government has a responsibility to mitigate the damages caused by the inlet. The proposed project would not replenish the beaches to the pre-inlet status, but would restore them to a point where the beach would serve as a protection from storms. I fully support this. It is our responsibility.

Additionally, Brevard County beaches have one of the highest concentrations of sea turtle nests in North America. Each year thousands of these endangered species come ashore to lay their eggs. Restoring these beaches will restore and protect this important habitat.

Canaveral Harbor Widening And Deepening: Rock Relocation Cost Sharing Adjustment

The Widening and Deepening Project at Port Canaveral was authorized by Section 101 of the 1992 WRDA - Public Law 102-580. The project called for widening the main channel to 400 feet and deepening the inner channel reach to 40 feet and other widening and deepening improvements. In particular, the widening of the inner channel required "pushing" the existing north and south sides of the channel back. This entailed dredging/excavation and relocation of the rock along the north and south sides of the channel.

The Report of the Chief of Engineers dated July 24, 1991, which serves as the authorizing document cited in P.L. 102-580, called for the rock relocation to be the financial responsibility of the non-Federal sponsor. The requirement was based on treating the rock relocation in the same manner as a relocation of a utility or a road. In 1994, the non-Federal sponsor, pointed out to the Corps that this interpretation was inconsistent with the way such relocations affected by the widening of the channel had been treated on other projects.

The Corps Jacksonville District investigated this matter and concurred with the non-Federal sponsor's view. The Corps' South Atlantic Division in Atlanta and the Director of Civil Works in Washington concurred in this view. Corps Counsel, however, while agreeing that the relocation should have been cost shared, stated that the adjustment could not be accomplished administratively but would require legislation in order for the adjustment to be made.

The Jacksonville District Engineer advised Port Canaveral of this decision on March 9, 1995, and indicated that "-- The U.S. Army Corps of Engineers is taking the necessary action to have legislative language added to the proposed Water Resources Development Act (WRDA) of 1995 which will change the authorized project and appropriately classify the revetments as general navigation features." Corps Headquarters has indicated that it plans to have such legislation included in their 1996 WRDA. The Senate included such a provision in Section 102(c) of S. 640, and I feel confident that the House will include a comparable provision.

Mr. Chairman, I am requesting that $640,000 be appropriated under the Construction, General account to reimburse the Port for a portion of the costs incurred by the non-Federal sponsors, (i.e., the 75 percent difference between the non-Federal cost of LERRDs versus the general navigation features).

Widening the Widener at the Entrance Channel

The recently completed Widening and Deepening Project authorized in the 1992 WRDA has allowed the Port to accommodate deeper draft vessels. Deeper draft vessels are now calling at the Port and more ships requiring the 39-foot main channel depths can be expected in the future. Although the channel depths are currently adequate, the newer ships are longer (over 800 feet) and require wider turns at full channel depth at the wideners.

When entering Port Canaveral from the sea, it is necessary to run the ship from compass heading 310 to 270, a turn of 40 degrees. This turn is outside the jetties. The pilots report that in bad weather ships are in an area where they are exposed to the full force of the elements and where, because of this fact, tugs most likely cannot help. They also state that the turn must be done after the ships have slowed down or are slowing down. Large, deeply loaded vessels carry their way for a long time. They must be slowed down well in advance, and at a slow speed, rudder power is diminished. This creates an unsafe situation for large, deeply loaded ships with a potential for grounding which would result in damage to the vessel, grave environmental damage, and possible loss of life.

Similar potential problems exist for longer cruise ships. Although they do not draw nearly as much water as tankers and bulk carriers, strong winds create a problem and could endanger their passengers. Obviously, this situation has to be corrected as safety is of the utmost concern.

The Corps has reviewed this situation and has determined that, consistent with existing law (Section 5 of the River and Harbor Act of 1915) and official Corps policy, it is appropriate to accomplish the bend widening work under the operation and maintenance program. The Corps is preparing a brief report documenting the situation with funds available in FY 1996 and would be prepared to accomplish the bend widening in the 1997 dredging cycle.

I am asking that the $1.3 million be included for this work as an added increment to the normal operation and maintenance budget request.

Florida Solar Energy Center

The Florida Solar Energy Center is a national leader in photovoltaics research and development and was designated the Southeast Photovoltaic Regional Experiment Station by the Committee last year. This research is a cooperative effort with New Mexico State University and its programs are directed towards economic development of new industries and related jobs.

The cooperative photovoltaics effort focuses on applications with the goal of providing U.S. manufacturers with better products that are more competitive in the U.S. and global marketplace. I am asking that $1,000,000 from the photovoltaic program funds be made available to the Southeast and Southwest Regional Experiment Stations to continue these ongoing programs.

Mr. KENNEDY. Mr. Chairman, the widening and deepening project authorized in 1992 widens our port to 400 feet wide and deepens it to 40 feet in our east channel. Along with this, some existing rock revetments need to be relocated.

The Corps took the position that the Port should make up 100 percent of the cost. We pointed out to them that it is inconsistent with other relocation projects the Corps has undertaken. The Jacksonville District of the Corps concurred with us. The counsel concurred. What we are looking for is new legislation to appropriate the funds to reimburse the 75 percent Federal cost that Port Canaveral has already incurred.

On widening the widener, the wider and deeper channel enabled us to bring in larger and deeper cargo ships, but they are also longer in length. Along with that the cruise industry, of which we are the second largest cruise port in Florida and third in the country, the cruise ships are also coming in a lot longer. The angle at which the ships have to turn to enter the channel is outside the protection of the jetties, leaving them open and exposed to the elements. A strong wind or nor'easter could push these vessels out of the channel and into shallow water, possibly running them aground.

We are asking for $1.3 million in additional O&M funds for the Corps when they come in with their fiscal year 1997 maintenance timetable to dredge out about 300,000 cubic yards of sand to widen the turning area for the ships that come in. But I would like to point out that the Navy has had navigation trouble bringing the Trident subs into that channel as well.

We appreciate the support this committee has given us in the past and we hope you will look favorably upon us again.

Mr. WELDON. I thank Commissioner Kennedy for joining me and I thank you for the opportunity to testify. You will be hearing testimony later in the week from the director of the Florida Solar Energy Center. The center is a national leader in photovoltaic research, and I encourage Congress' continued support. The committee has supported their research efforts in the past and I strongly encourage to you than and I thank you again for this opportunity to testify.

WEDNESDAY, FEBRUARY 28, 1996.

FLORIDA PROJECTS

WITNESS

HON. JOHN L. MICA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. YOUNG. Mr. Chairman, I would like to introduce a distinguished member of our delegation. Mr. John Mica.

Mr. MICA. Thank you. I will try to be brief. I have two projects I want to call to the committee's attention, the subcommittee's attention, and ask for your support. The first is really a very important project.

If you stop and think of Florida as a peninsula, and you look at the Everglades which they are now talking about spending in south Florida a billion and a half dollars to restore, my district is in central Florida near Orlando. North of that, from Cape Canaveral all the way up through 12 counties to Jacksonville, is the St. Johns River. This all has greater acreage than the Everglades, if you looked at what is left.

I represent a district that has two new cities in the last 24 months. The growth is absolutely phenomenal. One city has over 60,000 people, and this growth is coming in this area. I am here to ask you today to help on a project for $627,000 in the St. Johns River Basin to complete a study there on water quality.

We have worked with the State, and we have just acquired about 16,000 acres. We have about 2,000 acres more to connect the Ocala National Forest with the State park and preserve some of this area, but the water quality here is so important. To save billions down the pike—which you are going to spend, and I don't even think that 1½ will do the Everglades—we could spend a little bit of money now for the future and preserve this area and the water quality. So I am telling you, of all the projects that will come before you, nothing will have a better cost-effectiveness than this one.

The other one, briefly, is Ponce de Leon Inlet. This is an inlet north of Cape Canaveral. You have helped before on this. We have had 20 deaths. We have had scores of capsizings. It is an inlet that is very unstable. We have had a lot of erosion, like other areas have had.

We are asking for a total of $2.1 million to finish some of the work there. They are spending money. We want to make sure the money is spent right, and this will ensure that in fact it is done in an orderly and proper fashion and the taxpayers get the best for the money.

So those are my requests, and I also will join the other Members and thank you for your patience to hear all of our requests.

Mr. KNOLLENBERG. Thank you.

[The statement of Mr. Mica follows:]

Statement by Congressman John L. Mica
In Support of Florida Day

Before the House Appropriations Subcommittee on Energy and Water

February 28, 1996

FY 1997 funding requests for federal water resource projects:

St. Johns River Basin Study $ 627,000

Completion of this study is required to review and evaluate existing water quality problems and prevent future problems from developing in the St. Johns River.

Ponce De Leon Inlet Study $ 112,000

With construction scheduled to begin soon, this feasibility study should be completed to determine how this navigation project can be modified to provide a more stable and safe inlet.

Ponce De Leon Inlet Operation &Maintenance $ 2,000,000

Maintenance dredging is performed at this inlet about every three years, and construction is scheduled to being which will correct navigational and erosion problems and eliminate safety hazards.

* * *

JOHN L. MICA
7TH DISTRICT, FLORIDA

COMMITTEE ON GOVERNMENT REFORM
AND OVERSIGHT
CHAIRMAN, SUBCOMMITTEE ON CIVIL SERVICE
SCOMMITTEE ON NATIONAL SECURITY
NATIONAL AFFAIRS AND CRIMINAL JUSTICE
COMMITTEE ON TRANSPORTATION
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SUBCOMMITTEE ON SURFACE TRANSPORTATION
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STATEMENT BY CONGRESSMAN JOHN L. MICA

Mr. Chairman and Members of the Subcommittee, thank you for this opportunity to testify in support of Fiscal Year 1997 Budget funding for federal water resource projects in the State of Florida and the Florida Seventh Congressional District.

Today I would like to request the Committee's support for United States Army Corps activities relating to the St. Johns River and the Ponce De Leon Inlet. These important and vital projects impact the counties in my district as well as other counties throughout the State.

Let me first begin with the St. Johns River, which spans a 12-county area in east and central Florida. Unfortunately, this river has experienced many water quality problems which have been evidenced by fish kills, algae blooms, and water quality monitoring at selected sites.

Responding to this problem, Congress in 1984 directed the Corps to develop an interim water quality management plan for the St. Johns River Basin. The proposed feasibility study would assemble, review and evaluate existing data and information needed to establish water quality management practices within the St. Johns River system. An interim Phase I report was completed which recommended a model approach to meet management and user needs. Phase II, which remains to be completed, will continue the Phase I initiative and develop and calibrate a hydrodynamic/salinity model for this river system. Finally, Phase III will develop and calibrate the water quality model for the St. Johns River.

In summary, this study will develop water quality goals for the river basin, establish a monitoring and oversight program, and recommend specific actions to meet recommended goals. Implementation of the project should alleviate historical problems and prevent future problems from developing in rapidly growing areas of the river basin south of Jacksonville. Improved water quality will provide significant benefits to regional economics, aesthetics, recreational opportunities, and commercial and sport fisheries.

Funding has been provided in Fiscal Years 1987, 1988, 1990 and 1994. The total estimated federal cost for this project is $1,319,000 of which $692,000 has already been allocated. This study also has a 50/50 cost sharing with the St. Johns River Water Management District, and continuation of the study will be a cooperative effort with this Florida State agency.

The requested funding for this Water Quality Management Study is $627,000 and I urge the Subcommittee to fully support this project.

I would also like to express my support for Army Corps projects affecting the Ponce De Leon Inlet. This natural harbor connects the Atlantic Ocean with the Halifax River and the Indian River North, and is located on the east coast of Florida about 10 miles south of the City of Daytona Beach.

Ponce De Leon Inlet is the only access for recreational and commercial boaters in Volusia County to the Atlantic Ocean. Both recreational and commercial use of the inlet is heavy. Commercial traffic consists of charter and head boats as well as commercial fishing vessels. A U.S. Coast Guard Lifeboat Station is also located on the east shore of the Indian River about 0.7 of a mile south of the inlet.

Federal interest in navigation at Ponce De Leon Inlet started as early as 1884. In 1943, with U.S. Navy funds as a war measure to aid passage of Navy and Coast Guard ships, the Corps of Engineers dredged the inlet and interior connecting channels. In 1972, a federal project was completed at the inlet to improve navigation. The design consisted of an entrance channel flanked by rock jetties, with the north jetty containing a weir section connected to an impoundment basin to trap littoral sediments. Interior channels were also dredged to connect the entrance channel with the Intracoastal Waterway.

Although navigation has improved since this project was completed, a number of problems still exist and other major problems have since arisen. A sand spit inside the inlet and adjacent to the western end of the north jetty has undergone excessive erosion, and intense shoaling on the south side of the entrance channel has essentially closed navigational access to marinas. The entrance channel has migrated northward against the north jetty and now threatens the integrity of the north jetty. The weir was closed in 1984. Maintenance and other costs have totalled nearly $22 million since 1972.

With the constant shifting of the channel the Coast Guard has ongoing problems with navigation markers. Currently the outer end of the north jetty is marked by a single light, and the inner end of the jetty is awash. Navigation through the inlet is hampered by numerous recreational vessels anchored in the navigation channel along the south side of the north jetty. Navigational safety remains a critical problem. Between 1981-1991, Coast Guard records document 347 groundings, 109 vessels capsized, and 20 lives lost in the vicinity of the inlet.

If nothing is done to stabilize this inlet, wetland areas within the immediate vicinity will continue to suffer from erosion and changing conditions. The instability and shifting of the rocks on the north jetty are harming marine life, and boating accidents in the inlet may result in minor spills of oil and fuels as well as other chemicals.

Not only would a more stable inlet help provide a safer, more direct route for navigation to the ocean, it would also reduce future maintenance costs on the project. With the occurrence of a major storm, there is a very real probability that a breakthrough near the west end of the north jetty will occur within the next five years. A feasibility study nears completion which will determine how to provide a more stable and safe inlet.

I urge the Subcommittee to support $112,000 for completion of this feasibility study.

Finally, operating and maintenance funds are vitally needed to perform dredging which should alleviate navigational obstructions and reduce safety hazards. In addition construction was scheduled to begin in Fiscal Year 1997 of a scour apron to provide stability at the north jetty. Fiscal Year 1996 funds, totalling $278,000, are allocated for preparing the design and environmental documents for this construction. The scouring has been so extensive that the designed scour apron limits extend outside the structure's footprint. Because of the extended limits of the maintenance, a State of Florida water quality certificate is required, which has delayed construction of the scour apron until Fiscal Year 1997. The Ponce De Leon Inlet north jetty maintenance will be added to the Army Corps' FY 97 Capability Schedule.

I urge the Subcommittee to support $2,000,000 for operation and maintenance funds for the Ponce De Leon Inlet.

Mr. Chairman and Members of the Subcommittee, thank you for your time and consideration of these important projects.

Mr. YOUNG. Mr. Chairman, I suggested to my Florida colleagues earlier today that your generosity and this subcommittee's generosity will be relative to our brevity, and I think we will yield back our time to get you back on your announced schedule. We appreciate your consideration and look forward to working with you as we go through our appropriation process this year.

Mr. KNOLLENBERG. I was about to compliment you being just that: effective and efficient. You have done an excellent job and I appreciate that very much.

WEDNESDAY, FEBRUARY 28, 1996.

FLORIDA PROJECTS

WITNESS

HON. PETER DEUTSCH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. KNOLLENBERG. We welcome now Congressman Deutsch from Florida, who missed the earlier hour, but he is here now with us to take up where they left off.

So Congressman Deutsch.

Mr. DEUTSCH. Thank you very much.

In fact, I was working on something that is very much related to what my testimony is, which is the Everglades restoration. If you have been following the farm bill debate, you are aware that Congressman Foley and myself have an amendment this afternoon that would actually appropriate actually $210 million for land acquisition. But this subcommittee really for more than a decade has really been the leader in the—in the country, in the world, in terms of the Everglades restoration on some of the projects that have been appropriated through this subcommittee.

I have some testimony that I would like to submit for the record, but really try to briefly summarize it.

For those Members on this subcommittee who have been here—been here for a while, just anyone covering the—you know, in Congress, this subcommittee's jurisdiction includes the major Everglades restoration projects that have occurred up to this point in time, which is different than what we are going to do this afternoon, and hopefully will pass.

The Senate has actually already done that in their farm bill at a little bit lesser amount. But these are the actual Corps of Engineers' projects, which is the, C–111 South Dade Project, which will restore historic water flows to Taylor Slough and eastern panhandle areas to the Everglades National Park which will help reduce the deterioration that is going in Florida Bay. That is a continuation of an existing project; the C–51 West Improvement Project, needed to implement the Everglades River Act, which will provide five stormwater treatment areas to filter agricultural flood waters before being discharged into the Everglades.

And, again, you are aware of the Kissimmee River Project which this subcommittee has funded; the restoration will restore the natural stream flow where the Corps in a previous year actually made the Kissimmee, which was a wandering river, a canal, and through our appropriations we have actually restored it to a wandering river again. Hopefully, we won't restore it back to a canal 20 years from now, but I don't think we will.

So that really is the focus. And again, to thank this committee for its effort, and I believe that hopefully you will continue in those efforts on this project.

Just very, very quickly, a smaller dollar amount, but still a significant area, is the Aquatic Plant Management and Research Project. Again, I can ask a question, I am assuming all of you are pretty familiar with the problem of exotic plants and their effect on the Everglades. It is a subissue to all of this. But we can spend a lot of money doing restoration, but unless we deal with the exotic plants, the aquatic plants that are essentially invading the Everglades and doing more research on how to get rid of them, we are going to end up spending more money in the future.

The calculations are that for every 50 cents we invest in the plant control program, we save more than $100 in management costs down the road. That is a pretty good rate of return for our dollars.

We have funded this really every year but not a level where we can really maximize the benefits. So just from a purely economic standpoint, we are going to pay for it now or pay for it later. So I would urge the subcommittee to really try to increase the funding level on the aquatic plant management research.

Finally, just several local issues in Dade and Monroe Counties, I will just mention very quickly that I know other people have talked about the Dade County issues. Dade County has the good fortune to have six Members of Congress represent them, and so all of us can fight those issues, including the waste water refuge facility and the Miami Harbor redredging.

Monroe County has the good fortune of only having one Member of Congress representing them, and I have the good fortune of sitting here, and that is the Florida Keys. There is a Federal project that has been going on in Smathers Beach in Key West, which the Federal share of that is only $211,000, and hopefully that is something that the subcommittee will include in its budget at this point in time.

Now, also one of the really—unfortunately, in the sense of new issues, the Monroe County sewage treatment upgrade, just in terms of this whole Everglades restoration picture, what the best science is really telling us now is that the existing sewage system in Monroe County is not adequate. Traditionally, obviously, the local government should be dealing with it, but because of the Federal issue of Florida Bay and the Everglades, the resources in Monroe County do not allow it to do this type of upgrade within its sewer system. So hopefully it really is viewed as a Federal project and hopefully we can get some money out of the appropriations process for that facility.

Thank you very much.

[The statement of Mr. Deutsch follows:]

PETER DEUTSCH
20TH DISTRICT FLORIDA

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SUBCOMMITTEE ON HEALTH
AND ENVIRONMENT

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TESTIMONY OF REPRESENTATIVE PETER DEUTSCH BEFORE THE HOUSE APPROPRIATIONS COMMITTEE SUBCOMMITTEE ON ENERGY & WATER DEVELOPMENT

February 28, 1996

Chairman Meyers and members of the committee, I appreciate this opportunity to testify before the Energy and Water Development Subcommittee to discuss South Florida's public works program. I also appreciate the committee's effort to begin this process early, and I respectfully request permission to refine my testimony with specific funding levels in future correspondence once the Administration presents its budget requests.

In South Florida, public works are synonymous with securing our economic future because our economy is integrally linked to the health our environment. As you know, South Florida is home to the Everglades -- the largest subtropical wetland in the United States and a unique national treasure. Everglades National Park, established in 1947, is designated an International Biosphere Reserve, and Outstanding Florida Water, and a United Nations World Heritage Site. The Everglades "River of Grass" contains a diversity of plants and wildlife not found anywhere in the United States.

Unfortunately, the Everglades is also among the most endangered ecosystems in the world, and we have invested significant federal resources to help rebuild the system. As you know, Mr. Chairman, the plight of the Everglades has received broad national attention as Congress has studied new ways to fund this national priority. Last week, the Administration proposed an aggressive new funding initiative to accelerate restoration -- seeking a balanced cost share between taxpayers and Florida's sugar industry. I deeply appreciate the committee's strong support for Everglades restoration, and I am again requesting strong support for projects critical to the South Florida Ecosystem Restoration Initiative.

CENTRAL AND SOUTH FLORIDA PROJECT

C&SF COMPREHENSIVE REVIEW STUDY

Authorized by the Water Resources Development Act of 1992, the C&SF Review Study reexamines the C&SF in order to determine the feasibility of structural or operational changes to the project to fulfill its multiple purposes, which include flood protection, maintaining water supplies, protection of water quality, and environmental enhancement. Accordingly, the C&SF review study provides the critical road map for addressing the multiple use objectives and conflicts caused by the competition for water resources.

C-111/SOUTH DADE PROJECT

Canal 111 is part of the South Dade County portion of the C&SF project, and serves two, often conflicting purposes. -- It removes excess water for agricultural flood protection, and it provides water deliveries to Everglades National Park. To help resolve these often conflicting purposes, a C-111 reevaluation report with integrated environmental impact statement was developed and finally approved on July 1, 1994. It provides a plan for modifications to the existing water management system that will restore historic freshwater flows in the Taylor Slough and Eastern Panhandle areas of Everglades National Park, which s expected to help reverse the current deterioration of Florida Bay. Existing flood protection will be maintained for developed lands east of canals L-31N and C-111. In addition to this progress, the project cooperation agreement was signed on January 13, 1995, with the SFWMD.

C-51 WEST IMPROVEMENTS PROJECT

We are requesting continued support for improvements to the C-51 West Palm Beach Canal. This project calls for construction of five storm water treatment areas. Marsh vegetation in these treatment areas will be used to filter agricultural floodwaters before they are discharged to the Everglades. The C-51 project is an integral part of a technical plan produced from negotiations with the agricultural community, and it ranks high among the State and Administration priorities. Continued funding for this project will not only provide flood control and water supply benefits, but also water quality improvement benefits.

MODIFIED WATER DELIVERY TO EVERGLADES NATIONAL PARK

We also request that the committee favorably consider two concurrent efforts directed at improving water deliveries to the Everglades National Park (ENP). The Everglades National Park Protection and Expansion Act authorizes structural and operational modifications to the C&SF project to restore natural hydrologic conditions and enhance the natural resources of the Shark River Slough. While this project is funded through the National Park Service in conjunction with the Corps, we urge your favorable consideration of adequate funding for this critical project.

KISSIMMEE RIVER

The Kissimmee River project is critical to the restoration of the natural water flows through the Everglades and into Florida Bay. The Kissimmee River is the headwater of the Everglades ecosystem, but flood control efforts have diverted much of the water which previously flowed into the Everglades. In 1992, Congress authorized the Kissimmee River Restoration Project, which will help restore the original flow by backfilling portions of the river which were previously straightened. Construction is scheduled to begin this summer, and the first phase of backfilling in 1997.

AQUATIC PLANT CONTROL & RESEARCH

At a time when many states, including Florida, are experiencing surges in growth of invasive exotic plant species, it is critical that Congress support the Corps of Engineers' aquatic plant management cost-share program. Controlling the spread of exotics is essential to restoring the Everglades and maintaining Florida's navigable waterways.

We have been very successful in garnering delegation support, and I hope the committee will fund the program at its authorized $12.0 million level. We are grateful House and Senate conferees continued the program by appropriating $4.0 million for Fiscal Year 1996, but $12 million is needed to cover both research and weed control needs. The Corps' aquatic plant management program is a wise investment, for I understand that each fifty cents invested toward hydrilla control today saves more than $100 in new management costs later.

DADE COUNTY -- WASTEWATER REUSE FACILITY

I am also requesting $500,000 to support the Army Corps of Engineers' study into the need for a proposed wastewater reuse facility in Dade County. This will enable the Corps to complete the reconnaissance stage and begin the feasibility stage.

The Dade facility promises significant benefits. The South Florida Water Management District has determined that Dade County is a critical water storage area. Due to the competing demands between restoration efforts, growing human needs, and agriculture, the water supply system is stressed beyond the region's existing and projected water resources.

The high quality reclaimed water produced by the reuse facility will help satisfy the natural systems and agricultural demands by augmenting the canal system water levels, improving protection against salt water intrusion, replacing the potable water currently used for irrigation, and helping restore the natural hydrologic flows to the Everglades and related wetlands and estuaries.

MIAMI HARBOR -- DREDGING PROJECT

The Port of Miami is the largest cruise ship port in the world, and the second largest general cargo port on the Atlantic. It is essential for the safety and efficiency of cargo and passenger ships that the deepening of the Miami Harbor be completed as expeditiously as possible. To this end, the Port of Miami has entered into a reimbursement agreement with the Army Corps and is proceeding with the dredging program. Timely reimbursement of the federal share is essential in order to assure that the dredging is not interrupted and is completed on schedule. Should the federal share of this work not be reimbursed to the Seaport Department in Fiscal Years 1996 and 1997, it would have a substantial impact on the capital improvement program that will delay essential projects for port users.

I am requesting that the subcommittee provide $10.0 million for the federal share of dredging the Miami Harbor main ship channel. This would be in addition to the reprogrammed funds which the Dade County Congressional delegation has requested for Fiscal Year 1996.

CITY OF KEY WEST -- SMATHERS BEACH RENOURISHMENT

I am also requesting a small appropriation of $211,800 for the remaining federal share of the Smathers Beach renourishment project in Key West, Florida. Since Key West's economy is tourist-based, their limited beaches are of critical importance.

The Monroe County Shore Protection Project started with a feasibility report in 1982 for 8,770 feet of beach renourishment on the major beach in the City. I understand the Corps determined early on that the benefit ratio for this project was one of the best in the nation. In 1986, the Water Resources Development Act authorized a federal cost share of $4.15 million. Although federal funding for all beach nourishment projects was cut in 1989, the City of Key West and the Army Corps continued to work together to complete the project. The City is now overcoming an additional hurdle by addressing the state's concerns. Key West expects state permit approval within 6 months of submittal, and we respectfully request adequate funding for the federal share to complete this project. I have included detailed information from the City of Key West to help the committee in its consideration. We will continue to update the committee on the progress we are making in finalizing state permit approval.

MONROE COUNTY -- SEWAGE TREATMENT UPGRADES

South Florida is home to another national treasure -- North America's only coral barrier reef. Located about six miles off the Florida Keys at the southern end of the vast Everglades ecosystem, the reef parallels the 158-mile string of islands, and is among the most biologically diverse marine ecosystems in the world. The Keys' reef system is alive with an abundance of fish, stony and soft corals, sponges, jellyfish, anemones, snails, crabs, lobsters, rays, sea turtles and other sea life. The Keys' marine ecosystem not only supports a diversity of life, but it also supports the economy of Monroe County.

The special importance of the Keys' environment has made it a top concern at the local, state, and federal levels. Congress recognized the need to protect this national resource by designating the waters around the Keys a National Marine Sanctuary in 1989. One important priority is upgrading Monroe County's outdated sewage treatment infrastructure. The 82,000 residents and millions of visitors to the Florida Keys rely mainly on 25,000 septic tanks and 5,000 to 10,000 illegal cesspits for sewage treatment. These systems do not function properly in the porous rock of the Keys. Scientific studies have shown that excessive nutrients in nearshore waters are a direct result of improperly treated sewage.

Monroe County is currently developing an ambitious sewage treatment plan to help improve water quality in the Keys. This is one of the most important investments we can make. While the details of the plan are still being finalized, I have pledged to work with the County to seek federal assistance which I hope this committee can provide. In the coming months I will also be working with the Transportation and Infrastructure Committee for appropriate authorization. The Keys' environment is a vital asset for the people of Monroe County and the nation. I look forward to continuing work with the committee on this issue.

On behalf of the people of South Florida -- for their economy and the health of their environment that is a treasure to all Americans -- I appreciate this opportunity and look forward to continuing work with the committee.

THE CITY OF KEY WEST
P. O. BOX 1409
KEY WEST, FLORIDA 33041-1409

February 22, 1996

The Honorable Peter Deutsch
United States Representative, District 20
204 Cannon House Office Building
Washington, D.C. 20515

RE: Federal Funding for Monroe County Shore Protection Project, Smathers Beach Renourishment

Dear Congressman Deutsch:

On behalf of the citizens of the City of Key West, I respectfully request that you obtain a Congressional Appropriation for the funding of the Monroe County Shore Protection Project, Smathers Beach Renourishment Section for $211,800.00 to begin construction in fiscal year 1997-1998. Since the nature of Key West's economy is tourist based, our limited beaches are of the utmost importance. The Smathers Beach Project must be funded soon or we may face the loss of our largest beach.

The cost estimate for the project is:

Planning, Engineering and Design (USACE Figures)	$ 818,000.00 *
Sand Nourishment (USACE Figures)	$ 739,600.00
Seagrass Transplantation (USACE Estimate)	$ 100,000.00
Mitigation Preparation (City Estimate)	$ 402,000.00
	$2,059,600.00

*Funding for P.E.D. already provided by Congress, $818,000.00

I ask that you obtain a Congressional Appropriation for the remaining (50%) Federal cost share of $211,800.00 to start construction in fiscal year 1997-1998. The balance will be funded by the City of Key West.

Key to the Caribbean - Average yearly temperature 77° F.

The Monroe County Shore Protection Project started with a feasibility report in February of 1982 for 8,770 feet of beach renourishment on the major beach in the City. The Corps determined early on that the benefit ratio for this project was one of the best in the nation. The Water Resources Development Act of 1986 authorized the payment for a Federal cost share of $4,150,000.00. The Board of Rivers and Harbors recommended the project move forward in 3,000 foot segments as needed. Federal funding for all beach renourishment projects was cut in 1989 and our funding for the project was promptly lost.

Though funding was lost, Monroe County, The City of Key West and the United States Army Corps of Engineers did not give upon the project. We continued to work together in earnest to make it a reality. In 1993, the Florida Department of Natural Resources issued a letter of nonconcurrence because the project would negatively impact 4.7 acres of seagrass.

We have worked steadily from October 1993 when the Draft General Design Memorandum was completed to address all of the Department of Environmental Protection concerns and have reduced the affected seagrass to three tenths of an acre. We proposed over 4.5 acres of mitigation (including enhancements and restoration of seagrass habitat) for the seagrass and the Department of Environmental Protection has suggested that the permits will be approved within 6 months of submittal. With permitting eminent, funding is our next hurdle, and we need immediate help to save our beach.

Respectfully,

Dennis Wardlow
MAYOR
CITY OF KEY WEST

Encls:

(1) Army Corp of Engineer Cost Figures
(2) City of Key West Cost Figures
(3) Draft General Design Memorandum Cover

c:

Monroe County Beach Advisory Board
Shirley Freeman, Mayor, Monroe County

Shirley Freeman
Mayor

COUNTY OF MONROE
310 FLEMING STREET
KEY WEST FLORIDA 33040
(305) 292-3440

Middle Keys (305) 289-6038
Upper Keys (305) 852-7152
Fax (305) 292-3577

February 23, 1996

The Honorable Peter Deutsch
United States Representative, District 20
204 Cannon House Office Building
Washington, D.C. 20515

Re: Smathers Beach Renourishment (Near Key West Airport)

Dear Congressman Deutsch,

Please help us with funds to renourish Smathers Beach in Key West.

We need a Congressional Appropriation of $211,800 for construction in fiscal year 1997-98.

Key West, Monroe County and the State of Florida will fund the balance of the $2,000,000 cost.

Many thanks,

Shirley Freeman

Mayor Shirley Freeman
Monroe County, Florida

THE FLORIDA KEYS - AMERICA'S CARIBBEAN ISLANDS

Mr. KNOLLENBERG. Thank you very much, Mr. Deutsch.

I noticed—was it the Mayor of Key West, he couldn't help rubbing it in a little bit that the average temperature down there is 77 degrees?

Mr. DEUTSCH. Right. Let me tell you I actually have an office in Key West, if anyone wants to apply for my district director.

Mr. KNOLLENBERG. We send enough down, I think, as it is. But it is a great part of the country.

Mr. DEUTSCH. That office actually spends about a third of their time arranging just accommodations and restaurant advice of Members who find a reason to visit.

I will mention for those of you on the Appropriations Defense Subcommittee, actually the major installation of the operation that the Joint Task Force oversees in the South American Caribbean is based in Key West. In fact, it has been in the news recently because the recordings—it is not classified information but all the recordings of the pilots of the MIG jets actually were from that location in Key West. It is really an incredible operation. So it is a good reason to visit, especially since it is very topical.

Mr. KNOLLENBERG. That will be part of the record so we will take a look at that.

[The statements of the Hon. Porter Goss, Hon. Lincoln Diaz-Balart and Hon. Ileana Ros-Lehtinen follow:]

PORTER GOSS
14TH DISTRICT FLORIDA

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House of Representatives
Washington, DC 20515-0914

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3301 TAMIAMI TRAIL EAST
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(941) 774-8060

PUNTA GORDA
(941) 639-0051

Porter J. Goss

Testimony Before the Appropriations
Subcommittee on Energy & Water

28 February 1996

Summary of Requests:

Captiva Erosion Prevention (reimbursement)	$1,211,000
Lee County Shore Protection	$ 300,000
Fort Myers Beach (emergency reimbursement)	$ 375,000
Charlotte Harbor (navigation)	Oversight
Kissimmee River Restoration	$5,000,000
Central & Southern Florida Redesign	$1,000,000
C-51 West Project	$1,000,000
C-111 Project	$1,000,000

Mr. Chairman, I appreciate the opportunity to testify before you today. This panel has supported a number of worthy projects in Florida, and I know that assistance is appreciated.

This is an unusual year to present the funding requests for Corps of Engineers projects vital to Southwest Florida. As you are well aware, the Corps has not presented its own budget request -- usually the "reference material" for this hearing. As a result of the delay by the Administration in finalizing this request, many of the local project sponsors are unable to provide precise numbers -- so I hope the committee will understand if some of the figures presented today are more along the lines of estimates that could be revised at a later date.

This year, my requests fall into two categories: those relating directly to the Fourteenth Congressional District, and several that deal with the larger issue of Everglades ecosystem restoration.

Local

- **Captiva**. Mr. Chairman, Congress authorized a reimbursable beach renourishment project for Captiva Island under Section 215 of the Water Resources Development Act of 1986. The maximum federal contribution to this project is $3 million, and we have appropriated almost $1.8 million to repay the federal share of the first phase. Recently the Assistant Secretary of the Army for Civil Works approved entering into another Section 215 agreement for the 1996 phase of this project with the Captiva Erosion Prevention District. I would therefore request, on behalf of Captiva, an appropriation of $1.211 million, which is the full amount of the funds authorized, but not yet appropriated, by Congress.

- **Lee County Shore Protection Project**. Authorized by Congress in the early 1970's, this program is a good example of a local-federal partnership that has helped to preserve and protect the fragile shoreline along Lee County's barrier islands. The General Reevaluation Report (GRR) for Estero and Gasparilla Islands was begun last year, and $300,000 is needed to complete the GRR for this part of the program.

THIS STATIONERY PRINTED ON PAPER MADE OF RECYCLED FIBERS

• **Fort Myers Beach**. Locally, this is known as the Matanzas Pass channel at Fort Myers Beach, and it is normally a regularly scheduled operation and maintenance project for the Corps. However, an emergency situation has forced the local dredging authority, the West Coast Inland Navigation District (WCIND) to allocate $375,000 for emergency action. According to the District, the pass has become so shallow that the Coast Guard is being called on constantly to pull boats out of danger. WCIND has requested that they be reimbursed for this work, since the maintenance of this pass is normally a federal responsibility.

• **Charlotte Harbor Navigation**. Last year the Corps requested, and this committee appropriated, $3,275,000 specifically for dredging the channel in Charlotte Harbor, an authorized navigation project. Unfortunately, the Corps seems to have overlooked this fact, and it has told the local authorities and my office that there are not enough funds available to begin work. The channel has silted in to the point of becoming dangerous. Since the primary use of the channel is for transportation of fuel oil, Lee County and the local authorities are understandably concerned about the situation. I would request that the committee look into this issue as a matter of oversight.

Everglades

I don't believe that there is anything new to the committee in this area. I cannot stress enough the importance of the Corps work in restoring a more natural flow of fresh water to the Everglades and Florida Bay.

The Kissimmee River project has had a successful start, and we are looking forward to seeing the Corps move forward on this vital program. In essence, this involves correcting a mistake made by the federal government -- straightening the Kissimmee -- and helping to recreate a more natural environment that will increase wildlife habitat and improve the flow of fresh water to South Florida.

The other projects: the Central and Souther Florida Flood Control Redesign, the C-51 West and C-111 canal projects are all elements of a larger effort to restore a more natural volume and flow of fresh water south through the Everglades and into the (highly distressed) Florida Bay. The local sponsor for all the projects listed above is the South Florida Water Management District.

STATEMENT BY
REPRESENTATIVE LINCOLN DIAZ-BALART (FL-21)

BEFORE THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

FLORIDA INTERNATIONAL UNIVERSITY'S
HEMISPHERIC CENTER FOR ENVIRONMENTAL TECHNOLOGY (HCET)

FEBRUARY 28, 1996

Dear Chairman Meyers and Members of the Committee:

As a result of a new partnership between Florida International University (FIU) and the Department of Energy (DOE), FIU's Hemispheric Center for Environmental Technology (HCET) at FIU is working to increase the successful deployment of environmental technologies by marketing them to the commercial sector. HCET serves as the conduit to increase the flow of technologies developed by the researchers at FIU, the DOE, and the private sector to the nations of the Americas. The results of HCET's work will promote mutual economic benefit and sustainable development in the U.S. and Latin America.

FIU, a member of the State University System, is the public university in Miami, with an enrollment of 28,000 students. FIU is a majority minority institution, and a doctoral Granting II university. As a result of Federal research dollars provided by the DOE, FIU's minority student population receives hands-on training experience in the engineering discipline.

The Department of Energy's office of Science and Technology (DOE-OST) partnership with FIU also serves to enhance and improve U.S. competitiveness in the global environmental technology market. HCET serves the DOE-OST as an inexpensive yet efficient organization for fostering technology transfer and its commercialization. The FIU students performing the research today will be the environmental decisionmakers of tomorrow.

The incentives that FIU-HCET provides DOE-OST include the following:

1) Exposure in the global marketplace with an emphasis on the Americas;

2) A vehicle through which to reduce costs, reduce risks and offset their research and development expenses;

3) A site for technology demonstrations and a reporting capability that is credible;

4) A broker of environmental technology whose ultimate goal is to make it available for commercial use.

An FIU-HCET success story that has resulted in a cost-effective solution for a specific waste problem while exemplifying the goals of the DOE-OST is the Nitrate to Ammonia and Ceramic (NAC) project. The NAC project provides the DOE-OST with a technology for converting nuclear waste materials into self-contained, environmentally safe products for disposal.

NAC will be used primarily for the elimination of sodium nitrate-based low level liquid waste at several national laboratories and at other sites within the DOE Complex.

I am requesting your continued support of the Office of Science and Technology so that FIU's HCET will be able to increase the flow of technology to the Latin American and Caribbean nations. HCET will encourage the development and use of sustainable technologies to preserve the environment while fostering economic development.

HCET offers the following benefits to its partners in both the U.S. and the Americas:

1) Science and engineering capabilities;

2) Cost-effective technology development;

3) Technology assessment;

4) Access to markets and technology resources.

HCET will broaden the U.S. environmental industry's opportunities to market its exports in the Americas. HCET will develop and demonstrate innovative environmental technologies to ensure their commercialization and implementation.

Thank you for your consideration of this important program.

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Congress of the United States
House of Representatives
ILEANA ROS-LEHTINEN
18TH DISTRICT, FLORIDA

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Statement of Representative Ileana Ros-Lehtinen

Dade County Water Reuse Facility

On September 14, 1995, by unanimous approval of the House Transportation Committee, Congress authorized an Army Corps of Engineers' survey resolution relating to a water reuse facility for the residents of Dade County. This study is the first step to evaluating the role of a regional wastewater reuse facility as an important component of the larger solution to the water supply problems plaguing Dade County.

The Energy and Water Development Appropriations Act for Fiscal Year 1996 (FY 1996) provides language which enables the Army Corps to proceed with the initial stage of the survey.

$500,000 is needed in Fiscal Year 1997 (FY 1997) for the Army Corps to continue the reconnaissance stage and commence the feasibility study. Thank you for your consideration to including $500,000 within the FY 1997 energy and water development appropriations bill.

Miami Harbor Construction Project

I request that the subcommittee make every effort to provide $10 million within the Energy and Water Development Appropriations Act for 1997 for the dredging of a Miami Harbor main ship channel. This is equivalent to the amount of Federal expenditures which the Seaport Department will be front funding in FY 1997, pursuant to the reimbursement agreement which the Seaport Department has entered into with the Army Corps of Engineers.

This would be in addition to the funds which the Dade County Congressional delegation has requested to be reprogrammed in FY 1996. Enclosed is a copy of correspondence recently forwarded to Secretary Martin Lancaster.

The Port of Miami is the second largest general cargo port on the Atlantic Ocean. In addition, the Port is the home of 18 leading cruise ships, making it the cruise capital of the world.

Should the Miami Seaport Department not be reimbursed for the Federal share of the work on the channel in FY 1996 and 1997, it would have a substantial impact on the capital improvement program that will delay essential projects for port users. Additionally, the negative economic impact and disadvantages to Dade County in terms of jobs and dollars will be substantial.

Thank you for the subcommittee's continued support for dredging the Miami Harbor main ship channel.

Congress of the United States
Washington, DC 20515

February 1, 1996

The Honorable H. Martin Lancaster
Secretary For Civil Works, Dept. of the Army
The Pentagon
Washington, D.C. 20310

Dear Mr. Secretary:

We are writing regarding the dredging of the Miami main ship channel, to request that you make every effort to reimburse the Port of Miami this fiscal year for the federal share of the amount expended by the Port. Port of Miami officials estimate that the federal share will be in the vicinity of $10 million.

As you know, in order to expedite the deepening of the main ship channel, the Port of Miami is front funding the construction of the project pursuant to the Army Corps of Engineers' Section 204(e) reimbursement program. Phase I of the deepening has been completed. Phase II of the construction has begun and is scheduled to be completed over a three year period. The total cost of Phase II construction is approximately $50 million, with 65% federal participation, or $32 million.

Port of Miami officials inform us that they anticipate expending a minimum of $15 million in fiscal year 1996 and request reimbursement of the federal share, which would be $10 million. However, as you know, under the terms of the 204(e) agreement, the Seaport funds the Corps portion of the project until the project is completed and accepted. Should appropriations not be forthcoming in 1996, it should have a substantial impact on the capital improvement program that will delay essential projects for port users. Additionally the negative economic impact and disadvantages to Dade County in terms of jobs and dollars will be substantial.

We understand that the Jacksonville District Office of the Army Corps of Engineers has proposed a payment schedule which would authorize reimbursement payments as project increments are completed. The proposal has been approved by the Atlanta regional office and will be reaching your office for final approval shortly.

We would appreciate your support and expeditious approval of the pending payment schedule and, subsequently, reprogramming funds in Fiscal Year 1996 to the extent necessary to reimburse the Port for project increments completed this fiscal year.

Thank you for your close and careful attention to this matter.

Sincerely,

Carrie P. Meek

Alcee L. Hastings

Ileana Ros-Lehtinen

WEDNESDAY, FEBRUARY 28, 1996.

SOUTH CAROLINA PROJECTS

WITNESSES

HON. JAMES E. CLYBURN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF SOUTH CAROLINA

DON WELSH, EXECUTIVE DIRECTOR, SOUTH CAROLINA PORTS AUTHORITY

Mr. KNOLLENBERG. I understand that Congressman Clyburn is here and he has a constituent that he would like to bring forward, as well. So, Congressman, have a chair, and you are recognized appropriately.

Mr. CLYBURN. Thank you, Mr. Chairman, Members of the committee. I was about to recognize each Member of this committee by name. I suspect that being from South Carolina, I can get through Fazio pretty good, but I am not sure I can get through this name over here; though I recognize it, but I have problems with the cultural differences.

Mr. Chairman, I appreciate the opportunity to introduce one of my constituents, Don Welsh, who will testify on behalf of the State of South Carolina. Mr. Welsh will articulate the Port of Charleston's concerns, which, as you probably know, Mr. Chairman, is the second largest port on the East Coast and Gulf Coast of the United States. Its impact on the economy of South Carolina is tremendous, providing thousands of direct and indirect jobs.

I am sure you also are aware that in the 1993 round of base closings, Charleston took a severe hit, and of course we are struggling in that part of my district to overcome the effects of those base closings. This port is very, very important to those efforts.

There is something else that is even more immediate that I would ask this subcommittee to concern itself with. I know we have a problem with budget balancing and all of that, but I think that one of the things that we need to take into account, as you know, we have some treaty agreements and part of some of those agreements have to do with this port.

It has just been announced by the Department of Energy that Charleston is going to be the port of entry for spent nuclear fuel that will be coming back to us under our treaty agreements, and irrespective of any efforts to balance the budget. That stuff is coming back, and we have got to have a port that is safe enough to receive it.

And a lot of what Mr. Welch would have to say here today will concern itself with that as well. And so I am pleased to be here, and thanks so much for allowing me to present to you Don Welch.

Mr. KNOLLENBERG. Mr. Welch.

Mr. WELCH. Thank you, Congressman Clyburn, for that introduction. And, Mr. Chairman, I am delighted to be here.

I represent today not only the interests of the Port of Charleston, which I am the executive director, but I was asked also by the Governor's Office in South Carolina to represent our Governor, the Honorable David Beasley. So I will be wearing two hats somewhat.

My dearest love is the port, and Congressman Clyburn did refer to that as one of the—perhaps the most significant economic asset that South Carolina has. We are a small State, not rich in resources like many States.

We try our best to make the best of what we have, and what we have discovered, lo and behold, which was discovered many, many years ago, the port is a major asset and an attraction for industrial development and international business to be conducted.

That has—that is contributing very significantly to the economic base of the State of South Carolina, some 78,000 jobs that we can number with approximately $11 billion economic benefit to the State. That is at the present level.

So when we talk about the port, we talk about something that is very serious for us and we urge always the consideration, and that is one of our primary economic assets. I will try to remain brief, and I will summarize.

We have submitted in detail a list of projects in which the State has interest. Among those projects is the Port Project, but there are a number of others, smaller but nevertheless important projects, related to energy and water resources.

South Carolina is blessed with having a lot of water and we are learning how to use that water as an asset in terms of hydroelectric power, in terms of recreational opportunity and certainly in terms of ships and commerce.

So we are focused in that direction and we have long had a meaningful partnership with the Federal Government in developing these resources and making them attractive for people and attractive for business. We would like to continue that constructive relationship with the Federal Government, even with the knowledge that these are lean times.

These are pretty good investments that we are recommending. Any time you can make an investment with a return like this and basic infrastructure and things that apply to people and to commerce and to business and to jobs, that is meaningful. And we would urge your consideration.

We are basically supporting the budget request of the Corps of Engineers. We have gone over in detail with the Corps those projects that they feel are doable, that they feel are meaningful, would be constructive and that the State has assured whatever degree of participation is required of the State.

For example, in the Harbor Deepening Study and the deepening project that will be upcoming, we hope to get authorization for a deepening to 45 feet in the Charleston Harbor. I have already signed letters of commitment to the Corps of Engineers that would guarantee the State's participation in that. That report is currently in the chief's office and is due out, I think, very shortly.

So we keep our commitments. We make our commitments and we keep them. That—the last time we did this, I think I can point out an interesting return on investment. The last time we deepened the harbor, the Federal Government's share was about $33 million, as I recall. It is in here somewhere. And in a relatively short period of time, there was over $100 billion of U.S. Customs collections. And I know we don't like to talk about that because that money goes into another pocket, but these port investments generate a lot of revenue for the Federal Government. And that is a good example right there.

There are a number of projects. I will not try to go through all of these. We have highlighted a couple that range from aquatic weed control problems to continuing studies that have been identified as appropriate, appropriate use of people, appropriate use of facilities and money, to get at the truth of things, which is what we would very much like to do.

We would appreciate the consideration of this committee in approving the Corps of Engineers' requested budget, and I don't think that is quite with you yet, but it will be. And these projects, I think, will all be listed in that.

Mr. Chairman, that is all I have to say.

[The statement of Mr. Welch follows:]

South Carolina Statement for the Record to the
House Committee on Appropriations
Subcommitte on Energy and Water Development
February 28, 1996

Mr. Chairman, members of the Committee; good morning, and thank you for this opportunity to address you today.

I am Don Welch, the Executive Director of the South Carolina State Ports Authority, located in Charleston, S.C. Our Governor, The Honorable David Beasley, sought this occasion to highlight some concerns the citizens of South Carolina share with regard to the 1997 Energy and Water Appropriations Bill. Since the administration has until mid March to forward its detailed budget, we have yet to review its specific content, but are desirous none the less of commenting on certain projects and programs we consider to be in South Carolina's vital interest.

In the interest of time, I intend to keep my oral testimony brief, but would like to submit for the record more detailed information for your perusal and reference as desired. Included in this material are letters to the Committee from the Directors of the South Carolina Department of Natural Resources and the State Energy Office, as well as our State Ports Authority, emphasizing the importance of this Committee's action on the State of South Carolina.

As you are all no doubt aware, South Carolina is a small, coastal state whose economy is in no small way dependent upon its energy and water resources. Indeed, they are our lifeblood. Our lakes and reservoirs are critical to hydroelectric power production; intercoastal waterways and ports are key economic development components; and our beaches and shoreline essential to recreation and tourism.

South Carolina has enjoyed an outstanding partnership with the Federal Government, especially with the U.S. Army Corps of Engineers (USACE). Numerous projects are underway, or proposed, with sponsorship from the Corps of Engineers, without which most would never come to fruition. While we recognize the need to continue all revenue "belt tightening", we sincerely hope that projects and programs that are principal components of our economic well-being are allowed to continue to conclusion.

I would like to lend the States' strong support to the Corps of Engineers budget request. We are partners and co-sponsors on virtually every endeavor. The conduct of studies is mandatory to the maintenance and upkeep of our waterways. The material submitted for the record details each needed study, and the State concurs in every case with the Corps of Engineers recommendations. Please note the projects are listed alphabetically, so as to preclude any interpretation of priority - especially in light of the fact they are all of high priority.

Especially critical to South Carolina is the great Port of Charleston. A true national asset, plans to deepen the harbor are complimentary to its ongoing and future expansion. The Port of

Charleston is home of arguably the most efficient container terminal in the world today. In terms of volume, it ranks just behind the Port of New York and New Jersey. Suffice to say, keeping the Port of Charleston a state of the art capable harbor is in the best interest of not only South Carolina, but through its significant international trade, the entire country as well. Federal support to all channel maintenance is not a "nice to have", it's a "have to have"!

Related to our water resources, the Aquatic Plant Control (APC) Program ranks among our greatest concerns. A national program, the APC Program provides for the control and progressive eradication of various noxious aquatic plant species in navigable waters, tributaries, streams, and channels. It is a 50% - 50% cost share with the State, and without continued Federal support, there is eminent danger of loosing the productivity of our waterways. To date, over $20 million has been spent in South Carolina, half out of State agency revenues, but there is currently no Federal funding projected for 1997. This is a "show-stopper" for South Carolina, where aquatic weeds have already fouled hydro-electric turbines at our Lake Moultrie site. Proposed cuts in the aquatic plant control share program comes at a pivotal time in our management efforts. We emplore you ensure the funding of this essential program, and further, to stipulate funds for treatment, not just research.

Another essential program the Corps of Engineers has very successfully managed, is the Continuing Authorities Program (CAP). This is a cost-shared program between the Federal government and a non-Federal sponsor. The CAP allows the Corps of Engineers to plan, design, and construct certain types of water resources improvements without specific Congressional authorization. The Charleston District Corps of Engineers Office currently has eight requests for assistance which are on hold due to lack of Federal funds. In continuing the funding for the CAP, we also urge guidance be provided that would preserve the integrity of discretionary use of these finds and discourage the "earmarking" of revenue for individual projects as a condition of its existence. We appreciate your positive consideration in continuing the CAP - not to do so would be short sighted.

Clearly in the national interest is the continued viability of the Corps of Engineers Operations and Maintenance (O&M) Program. Designed to preserve the nations existing infrastructure, the O&M program provides for the operation and maintenance of Federal projects such as navigation, flood control, multiple purpose power, national emergency preparedness and recreation facilities at completed properties. USACE currently operates and maintains ten navigation sites within South Carolina, with work ranging in areas such as dredging, diking, surveying and powerhouse operation. We strongly support the continued funding at requested levels for this critical program and its essential services. It is not an expenditure, it is an investment.

As I alluded to previously, the above mentioned programs, as well as all other major initiatives, are reflected in greater detail in our material submitted for the record.

Before closing, I would like to speak to our energy concerns for just a moment. South Carolina is very proud of its proactive energy programs which provide both a necessary service to our citizens, and protection of the environment. Through energy conservation programs, the State is pursuing the implementation of greater efficiency and reduced pollutants environmental control systems in all schools, colleges, universities, and State agencies, statewide.

The Federal government has been a principal partner in our progress. However, with the phasing out of Federal programs such as the Institutional Conservation Program (ICP) and the State Energy Conservation Program (SECP), and the pending implementation of the State Energy Plan (SEP), (a sort of "block grant" to states), there is some anxiety regarding funding levels. Adequate funding of the SEP is very important, least the positive momentum in the critical areas of energy conservation and the environment, might well be lost.

Related to energy issues, we welcome, indeed encourage, the continued Congressional support to our Department of Energy Savannah River Site, near Aiken, South Carolina. This defense nuclear production facility covers some 300 square miles, and despite Federal downsizing remains a viable and important national asset.

In summary, South Carolina occupies a unique position in our national interest - key military installations, coastal geography, interstate trade routes, and international commerce. We are a willing, and responsible partner with the Federal government. But we are not a rich state, and are dependent upon co-sponsorship for critical programs as they relate to energy and water. To this end, we solicit your support in ensuring requested projects are fully funded, and allowed to come to a successful conclusion.

On behalf of the Governor, and the citizens of the Palmetto State, I appreciate your indulgence, and sincerely thank you for your support of our pursuit of excellence.

South Carolina Department of
Natural Resources

James A. Timmerman, Jr., Ph.D.
Director

February 26, 1996

The Honorable John T. Myers, Chairman
Appropriations Subcommittee on Energy & Water
2362 Rayburn Building
Washington, DC 20515

Dear Mr. Chairman:

We appreciate the opportunity for the State of South Carolina to appear before your Subcommittee and to provide this as well as other testimony. While we recognize that the Budget will be balanced and laud this action, we are concerned with some of the priorities for the remaining funds.

Noxious aquatic weeds present a vexing problem for the Nation and for many states, from Florida to California, including South Carolina. Exotic species such as hydrilla, water hyacinths and Eurasian watermilfoil are rapidly infesting our lakes and rivers where they impair electric power generation, clog municipal drinking water intakes, impede navigation, impair recreational uses and overwhelm our desirable native plant species.

Through a close partnership with the Corps of Engineers and local entities, we have implemented innovative cost-efficient control techniques to minimize the impacts and spread of these species for the past 15 years. However, the 75 percent reduction in the Corps of Engineers' Aquatic Plant Control Program cost-share funds during FY 96 has crippled our efforts to implement effective control measures this year. Even after acquiring some additional local funds, aquatic plant control efforts are expected to be reduced by over 50 percent. With the loss of the federal funds we anticipate immediate impacts to the economic and ecological integrity of our public waters and a long-term increased threat to many still uninfested waterways.

We ask that you consider increasing the funding of the Corps' Aquatic Plant Control Program for FY 97 to its historic level of $9 million and earmarking a majority of the funds for cost-share with the states.

Sincerely,

James A. Timmerman, Jr.
Director

JATjr:jk

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JAY A. FLANAGAN, P.E.
DIRECTOR

February 23, 1996

U. S. House of Representatives, Committee on Appropriations
Energy and Water Development Sub-Committee
Washington, DC

Gentlemen:

I urge you to continue funding the Department of Energy's support for the State Grant Program. The small amounts of money going into this program leverage large cost savings for schools, state agencies, businesses and individual consumers, as well as increase America's economic competitiveness and improve the environment. As examples of effective use of these funds, South Carolina in the last three years has:

* converted its state fleet vehicles to more fuel efficient models;
* increased use of alternatively fueled vehicles;
* installed energy efficient lighting resulting in 20% - 30% returns on investment;
* helped schools reduce energy costs by millions of dollars;
* diverted thousands of tons of municipal solid waste from landfills through recycling;
* increased energy efficiency of manufactured homes, saving millions of dollars annually.

This is one government program that provides a return on investment. As federal and state budgets shrink, it is imperative that we continue to support cost effective solutions to our energy problems. We need to strengthen this effort, not diminish it.

Sincerely,

Jay A. Flanagan

Jay A. Flanagan, P.E.
Director

SOUTH CAROLINA STATE PORTS AUTHORITY
Post Office Box 817, Charleston, South Carolina 29402-0817 Telephone 803/577-8600

W. Don Welch
EXECUTIVE DIRECTOR

February 26, 1996

The Honorable John T. Myers, Chairman
Sub-Committee on Energy and Water Development
House Committee on Appropriations
2362 Rayburn House Office Building
Washington, DC 20515

Dear Congressman Myers:

The South Carolina State Ports Authority owns and operates three ports in South Carolina, Charleston, Georgetown, and Port Royal. Charleston is, by far, the largest and most nationally significant, ranking just behind New York and New Jersey as the second largest Eastern container port. However, all of South Carolina's port system contributes significantly to the economic well being of the State providing jobs for 78,000 citizens and a combined economic impact of $11 billion dollars per year. It is because of Charleston's strategic port impact on bothe South Carolina and the United States that I am contributing testimony to the Energy and water Sub-Committee.

Over one-million container boxes move in and out of Charleston harbor every year and they move on 1,650 vessels, many of them twice as large as they were just twenty years ago. Ships 965 feet long and drawing 41-42 feet of water are commonplace today. While maintaining navigation channels is vital for today, deepening them for tomorrow is of equal importance in order to keep up with international vessel trends. In the next two to three years major steamship lines will receive from the shipbuilders 100 new container ships - over 1,040 feet in length - and carrying 5,000 to 6,000 teus each. Design drafts will be from 41-46 feet.

While these new state-of-the-art ships bring efficiency and economies of scale to the steamship lines their channel depth requirements bring major concerns to many U. S. Ports. For example, Charleston has 40-foot channels, deepened only recently from 35 feet under the authority of the 1986 Water Resources Act. Now, in an effort to keep pace with ship building technology, Charleston has just co-funded with the U. S. Army Corps of Engineers a feasibility study for deepening its channels to 45 feet. The studies have clearly demonstrated that deepening is both commercially necessary and economically justified. The next step is authorization in the 1996 Water Resources Bill.

In preparation for that major step, the South Carolina State Ports Authority has signed a letter of intent and financial capability. This means that there will be an approximate 35% non-federal participation in the estimated $116 million cost to deepen Charleston's channels to 45 feet.

In 1986, the Federal share of Charleston harbor deepening to 40 feet was approximately $33 million. In exchange for these federal monies spent on harbor deepening, the U.S. has received since 1987, over $3 billion in Custom's receipts at the Charleston district. (That is just through 1994; 1995 figures are not yet available). The goods moving through Charleston between 1987 and 1994 were valued at $107 billion. Since Charleston is an export port with the percentage of exports during those years hovering at 60 -plus percent, one can readily see how valuable Charleston's navigation channels are to the Southeast region and to the nation. Further, with the Port of Charleston's recent and current growth in the double-digits annually, one can also see how much more valuable those channels will become in the years ahead to the businesses located in twenty-six states that currently use the Port of Charleston to further their international business objectives.

Once channels are dredged, they must be maintained. The material that accumulates in the channels must be removed periodically and placed in approved disposal areas. At the present time the national policy is that the non-federal sponsor, (in South Carolina's case the State Ports Authority), must furnish and pay to maintain the disposal areas used for deposit of material dredged from federal channels. This is no small problem or responsibility, in large part due to the federally-imposed environmental constraints attached thereto. It is not only extremely difficult to locate suitable sites, but is becoming more and more expensive because of federal environmental mandates. Because this is true these costs should be shared by the federal government on the same basis as channel construction costs. After all, disposal is consequential to dredging; one can't be done without the other. The South Carolina Port system does not have taxing authority, nor does it receive State appropriations. Accordingly, meeting these ever-increasing costs, which are about $2 million a year at present, is a serious financial problem for the Authority, taking away from its primary mission to provide high quality marine terminal services. As this year's Water Resources Bill is being prepared, it is urgent that maintenance cost-sharing be included in the legislation, for the good of all U. S. Ports. It is patently unfair to download this entire burden to port communities, considering the increasing difficulty and cost of complying with federally-mandated environmental regulations.

Congressman Myers
Page three
February 23, 1996

Ninety-five percent of all United States international trade moves by ship. Those ships require adequate channels with proper maintenance to access U. S. Ports. Please understand the overwhelming importance of timely appropriations to the present and future well-being of the national economy.

I extend my appreciation to your Committee for your time and attention.

Sincerely,

W. Don Welch

WDW/lr

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NOTE: The projects are listed alphabetically and not by priority.

DISTRICT: Charleston .

APPROPRIATION: Construction, General

PROGRAM: Aquatic Plant Control

REQUESTED FUNDS: $1,600,000

SPONSOR: South Carolina Department of Natural Resources, Water Resources Division

DESCRIPTION: The Aquatic Plant Control Program provides for the control and progressive eradication of water hyacinth, alligatorweed, hydrilla, and other noxious aquatic plant growths from navigable waters, tributaries, streams, connecting channels, and other allied waters of the United States. This program is cost-shared at the rate of 50% Federal and 50% non-Federal. This program was identified for termination after Fiscal Year 1995; however, reduced funding was provided to the Corps of Engineers in Fiscal Year 1996, most of which was designated for research purposes as opposed to treatment purposes. Termination of this program will result in a rapid expansion of aquatic plants and the resultant restriction on the use of affected water areas within South Carolina. Although the State is increasing the level of their aquatic plant control spending each year in an attempt to gain control of the aquatic plant problem, the reduction or elimination of Federal participation will severely impact the State's capability to maintain navigable waters. This program must be funded at the requested level to continue with the essential treatment of state waters.

DISTRICT: Charleston

APPROPRIATION: General Investigations

STUDY: Atlantic Intracoastal Waterway

REQUESTED FUNDS: $400,000

SPONSOR: The South Carolina Office of Ocean and Coastal Resource Management is the potential sponsor.

DESCRIPTION: Problems to be addressed during this study will include the need for continued maintenance at the authorized depth; maintenance dredging needs; shoaling rates and disposal area needs; alternatives to reduce maintenance dredging costs; beneficial uses of dredged material; determine practical lift and height to which disposal areas can be constructed on marsh-like foundations; identify hazards to navigation; identify easement encroachments (docks, bulkheads, bridges, etc.) on the viability of the waterway; bank erosion and the control of such both in land cuts and the marshlands; fish and wildlife habitat; loss of wetlands and oyster beds; water quality; and restoration of wetlands altered by disposal operations. South Carolina is responsible for providing the disposal areas for the AIWW, and we believe it is time for an in-depth analysis to assist in decisions that must be made concerning disposal areas.

DISTRICT: Charleston

APPROPRIATION: General Investigations

STUDY: Charleston Estuary

REQUESTED FUNDS: $400,000

SPONSOR: The South Carolina Office of Ocean and Coastal Resource Management is the potential sponsor.

DESCRIPTION: The estuary covers portions of Charleston, Berkeley, and Dorchester Counties, and consists of over 50,000 acres of coastal marshes and associated flora and fauna. The major water bodies in the estuary are the tidal reaches of the Ashley, Cooper, Stono, and Wando Rivers, and the lower portions of Charleston Harbor. This basin-wide study will identify problems from current land uses and associated runoff, characterize important species and habitants, identify historic recent losses of important habitats and populations of important species, develop water resource management plans, and ecosystem restoration. The South Carolina Office of Ocean and Coastal Resource Management is nearing the completion of the comprehensive Charleston Harbor Project and this Corps of Engineers study is a logical follow-on to identify and move forward those projects that are consistent with State goals and needs.

DISTRICT: Charleston

APPROPRIATION: General Investigations

STUDY: Charleston Harbor Deepening and Widening

REQUESTED FUNDS: $300,000

SPONSOR: The South Carolina State Ports Authority

DESCRIPTION: Commerce in Charleston Harbor has increased from 6.8 million tons in 1982 to approximately 11.0 million tons in 1994, with the largest portion of the increase being in containerized cargo. The State Ports Authority has been operating at capacity, which has forced them to expand the Wando Welch terminal and investigate locations for new terminal locations. There has been an increase in the size of vessels using or desiring to use the terminal facilities in Charleston Harbor, and the percentage of these large vessels is expected to increase in the future. Many of these larger vessels are presently required to light load and/or make use of tidal advantages due to the existing navigational depths. With a deeper channel, these vessels will be able to operate more efficiently. The State Ports Authority has expressed a need for deepening the Charleston Harbor Project and construction of a turning basin for the new terminal facilities is recommended. Continued planning and engineering for this vital project is essential.

DISTRICT: Charleston

APPROPRIATION: Operations and Maintenance

PROJECT: Clouter Creek Disposal Area

REQUESTED FUNDS: $1,200,000

SPONSOR: The South Carolina State Ports Authority

DESCRIPTION: The Clouter Creek Disposal Area is a major dredged material disposal area under the administrative control of the Navy. It is proposed to transfer administrative control to the Department of the Army and re-dike the area at Federal expense. In the future, funds collected from users would be used to raise and maintain the dikes. The Navy's portion of the disposal area has received little attention in the past five years. Ditching, clearing, spillway replacement, and dike reconstruction must be accomplished prior to reuse. Restoration of these dikes is vital to the redevelopment and future use of the Charleston Naval Complex. The South Carolina State Ports Authority is responsible for diking disposal areas serving the Charleston Harbor Navigation Project; however, there is no immediate need for the Navy's area by the SPA or the Corps that would justify the expenditures required to restore the dikes.

DISTRICT: Charleston

APPROPRIATION: Construction, General

PROGRAM: Continuing Authorities Program

REQUESTED FUNDS: Fund at Historic Levels

DESCRIPTION: The Secretary of the Army, acting through the Chief of Engineers, is authorized to plan, design, and construct certain types of water resources improvements without specific Congressional Authorization. This program is cost-shared between the Federal Government and the non-Federal sponsor. Cost shared amounts differ depending on the type of project being undertaken. These authorities are called the Continuing Authorities Program. They consist of:

Section 14, Flood Control Act of 1946 (PL 79-526), as amended, for emergency streambank and shoreline erosion protection for public facilities and services.

Section 103, River and Harbor Act of 1962 (PL 87-874), as amended, for hurricane and storm damage reduction.

Section 107, River and Harbor Act of 1960 (PL 86-645), as amended, for navigation.

Section 111, River and Harbor Act of 1968 (PL 90-483), as amended, for mitigation of shoreline erosion damage caused by navigation projects.

Section 205, Flood Control Act of 1948 (PL 80-858), as amended, for flood control.

Section 208, Flood Control Act of 1954 (PL 83-780), as amended, for snagging and clearing for flood control.

Local governments in South Carolina support this program and have continued to request assistance from the Corps of Engineers. There are currently seven study requests waiting for funds:

Cow Castle Creek - Section 205
Johnson's Swamp/Andrews - Section 205
Castle Pinckney - Section 103
Goose Creek - Section 205
Causar Branch - Section 205
Black River - Section 205
Swamp Lake - Section 205

Due to a funding shortfall at the national level, the Corps has been forced to delay three projects, as well as two ongoing Section 14 studies and a Section 103 project. The highly visible Arcadian Shores Section 103 study has been delayed for approximately four months and may result in a loss of approximately $2,000,000 to the sponsor if not funded immediately.

During Fiscal Year 1995, the Charleston District completed construction of the Santee Dam Section 14 Project, and the Pinopolis Dam Section 14 Project. During Fiscal Year 1996, construction was completed on the Battery Pringle Section 103 Project. These projects are important to the continued economic development and well-being of the citizens of South Carolina. We support a vigorous program that would allow the Chief of Engineers to respond to every request received.

DISTRICT: Charleston

APPROPRIATION: General Investigations

STUDY: Cooper River Navigation

REQUESTED FUNDS: $400,000

SPONSOR: The South Carolina State Ports Authority is the potential sponsor.

DESCRIPTION: This study would evaluate the feasibility of extending the navigational channel in Charleston Harbor to provide for deep-draft navigation to industrial facilities located above the upper limits of the Federally-maintained channel on the Cooper River. Potential industrial users include Mobay Chemical, DuPont Chemical, and Amoco Chemical. NUCOR Steel is also located in this reach of the Cooper River. Upon completion of this new plant in the spring of 1996, 400,000 tons of iron carbide is expected to be received. The current depth and configuration of this portion of the Cooper River limits the ability of these facilities to fully utilize the existing Federally-maintained channel. The continued economic growth of this region of the State is linked to the Cooper River and our ability to provide for commercial navigation.

DISTRICT: Charleston

APPROPRIATION: General Investigations

STUDY: Edisto River

REQUESTED FUNDS: $400,000

SPONSOR: The State of South Carolina is the potential sponsor.

DESCRIPTION: The Edisto River Watershed, with a tidal reach of 38 miles, extends northward from the coast at St. Helena Sound and lies entirely within the State of South Carolina between the Savannah River and the Santee River basins. The basin-wide ecosystem study will consider water resource needs including flood control, water supply, navigation, recreation, and environmental enhancement/restoration. The State of South Carolina has just conducted a comprehensive analysis of the watershed to identify important features and to build consensus for management strategies. Many hours have been spent over the last two years obtaining citizen and agency input. The Corps' study is the logical follow-on to identify those strategies that lend themselves to Federal/State implementation.

DISTRICT: Charleston

APPROPRIATION: General Investigations

STUDY: Georgetown Harbor

REQUESTED FUNDS: $250,000

SPONSOR: The South Carolina State Ports Authority is the potential sponsor.

DESCRIPTION: This is a continuing study. Georgetown is located 60 miles northeast of Charleston. The existing project provides for a channel 27 feet deep, from the Atlantic Ocean to a turning basin at Georgetown. Since 1984, $8.5 million has been spent on infrastructure improvements by the South Carolina State Ports Authority and private interests. Commerce has increased from 249,000 tons in 1984 to over 1.3 million tons in 1995. The majority of the vessels currently using the harbor cannot navigate the channel fully loaded. This study will determine if there is economic justification for a deeper channel or other modifications that will improve navigation. It will investigate the feasibility of modifying the existing project to include a maintenance plan which will provide authorized 27' depth year round and a disposal plan which is economically and environmentally acceptable. Open water disposal in Winyah Bay has been controversial, but thus far has been found to be the only viable alternative. This study will address the disposal problems in more detail and seek other, more environmentally acceptable disposal options.

DISTRICT: Charleston

APPROPRIATION: Construction, General

PROJECT: Myrtle Beach Storm Damage Reduction

REQUESTED FUNDS: $13,000,000

SPONSORS: The City of North Myrtle Beach, The City of Myrtle Beach, and Horry County

DESCRIPTION: The Myrtle Beach project is located along the northern coast of South Carolina and extends from Little River Inlet at the North Carolina border, in a southerly direction, to Murrells Inlet, for a total distance of approximately 37 miles. It includes the entire coast of Horry County and a portion of the coastal area of Georgetown County. The project consists of placement of 5.1 million cubic yards of sand for initial construction of 25.4 miles of protective beach, encompassing three separable reaches. Material will come from offshore borrow sites. Periodic nourishment is authorized for a 50-year period and will be required about every eight to ten years. The value of protected property for the 37-mile project reach is estimated to be in excess of $1.4 billion. The continuation of this project is essential for the State of South Carolina.

DISTRICT: Savannah

APPROPRIATION: General Investigations

STUDY: New Savannah Bluff Lock and Dam, GA & SC (Surveys)

REQUESTED FUNDS: $400,000

SPONSOR: South Carolina supports the study.

DESCRIPTION: The New Savannah Bluff Lock and Dam (NSBL&D) is located 13 miles downstream from Augusta, Georgia, on the Savannah River in Aiken County, South Carolina, and Richmond County, Georgia. The NSBL&D is a concrete structure that consists of a lock chamber and gated spillway. The lock chamber is 56 feet wide and 360 feet long and has a maximum lift height of 15 feet. The dam spillway has three nonoverflow type vertical lift gates 62 feet wide by 15 feet wide by 12 feet high that are used for pool regulation. The structure was authorized in the Rivers and Harbors Act of 1930, and constructed in the late 1930's as a WPA project.

DISTRICT: Charleston

APPROPRIATION: Operations and Maintenance

REQUESTED FUNDS: Fund the District's Request

DESCRIPTION: The purpose of this program is to preserve the Nation's existing infrastructure. It provides for the operation and maintenance of Federal projects for purposes of navigation; flood control; multiple purpose power; protection of navigation; national emergency preparedness; and recreation facilities at completed projects. Within South Carolina, the Corps of Engineers annually operates and maintains ten navigation projects and three major reservoirs. Work performed consists of maintenance dredging and diking, condition surveys, monitoring efforts, and operating and maintaining the powerhouses. In addition, the National Emergency Preparedness Program ensures that the Corps of Engineers can provide support for the Nation during national security threatening events. The State of South Carolina also supports O&M funds to support rewinding of generators and refurbishment of turbines at Hartwell Dam and Lake and J. Strom Thurmond Dam and Lake.

DISTRICT: Charleston

APPROPRIATION: General Investigations

STUDY: Santee, Cooper, and Congaree Rivers

REQUESTED FUNDS: $250,000

SPONSOR: The South Carolina Department of Natural Resources and the South Carolina Public Service Authority are the potential sponsors.

DESCRIPTION: This is a continuing study. The study area includes portions of western North Carolina and extends to the South Carolina coast, flowing through portions of 16 counties in South Carolina. The total drainage area of the basin is over 15,000 square miles, of which portions within South Carolina encompass 33% of the State's total land area and included over 60% of the State's population. This basin-wide ecosystem study will consider water resource needs including flood control, water supply, hydropower, navigation, recreation, and environmental enhancement/restoration. The State is interested in this study because it offers an opportunity for comprehensive ecosystem planning and improvement.

DISTRICT: Savannah

APPROPRIATION: General Investigations

STUDY: Savannah River Basin Comprehensive, GA & SC (Surveys)

REQUESTED FUNDS: $400,000

SPONSOR: South Carolina supports the study and is a potential co-sponsor.

DESCRIPTION: The Savannah River Basin comprises the boundary between South Carolina and Georgia; its drainage area is approximately 11,000 square miles, which is roughly split between the two principles states. A small portion of the upper basin is in North Carolina. Several large Federal and private multipurpose reservoirs are in the upper basin area serving many needs such as hydropower generation, water supply, and recreation.

DISTRICT: Charleston

APPROPRIATION: General Investigations

STUDY: Waccamaw River

REQUESTED FUNDS: $400,000

SPONSOR: The City of Myrtle Beach is the potential sponsor.

DESCRIPTION: The Waccamaw River is located entirely in the coastal plain of North and South Carolina and has a drainage area of approximately 1,530 square miles. The study area lies in the south Atlantic lower coastal plain region. The land surface is nearly level with broad depressions associated with drainage ways or wetlands. These wetlands provide high quality fish and wildlife habitat, especially habitat for wildlife of high public significance, such as waterfowl and shore birds. The lower reaches of the Waccamaw watershed are characterized by the presence of thousands of acres of remnant rice fields which are very unique and productive coastal ecotypes. Elevation in the basin ranges from sea level to approximately 10 feet above sea level. Flooding has occurred throughout the basin resulting in the construction of ten Corps small flood control projects over the last 40 years. The Atlantic Intracoastal Waterway follows the Waccamaw River for approximately 35 miles in its lower reach before entering Winyah Bay. The Waccamaw River watershed supports several threatened and endangered species including the red-cockaded woodpecker, bald eagle, wood stork, and shortnose sturgeon. This study will examine the magnitude of flood problems in the basin and determine the feasibility of an ecosystem restoration project, with an aim toward water quality enhancement, water resource allocation planning, and fish and wildlife habitat restoration.

DISTRICT: Charleston

APPROPRIATION: General Investigations

STUDY: Yadkin-Pee Dee River

REQUESTED FUNDS: $400,000

SPONSOR: The State of South Carolina is the potential sponsor.

DESCRIPTION: The Yadkin-Pee Dee River is the largest basin draining into the South Atlantic Coast and extends northwest from the coast at Georgetown, South Carolina, across the North Carolina state line into western North Carolina, with a small portion extending into Virginia. The watershed has an area of 16,340 square miles, of which 6,880 are in South Carolina, 9,280 are in North Carolina, and 180 are in Virginia. The basin-wide ecosystem study will consider water resource needs including flood control, water supply, hydropower, navigation, recreation, and environmental enhancement/restoration. South Carolina is interested in this study because it offers an opportunity for comprehensive planning. We have concerns about the availability of drinking water, impacts of drought and flooding and concerns about groundwater reserves. There may also be opportunities for environmental restoration and enhancement.

Mr. KNOLLENBERG. Thank you, Mr. Welch.

Mr. Clyburn, Congressman Clyburn, do you have any additional comments in.

Mr. CLYBURN. No. Thank you so much.

Mr. KNOLLENBERG. We have a little extra time.

Mr. Fazio, you have joined us.

Do you have any questions or offerings?

Mr. FAZIO. Mr. Chairman, I would just reflect on the fact that the last several delegations have come in here with strong support, good cost/benefit ratios and all the rest, but we are facing, as I think everyone certainly on this committee knows and I know Jim Clyburn knows, an increasingly difficult time for discretionary domestic spending.

When I came to Congress, it was about 30 percent of the budget. It is now 15 percent and going further down. And we are going to need the support of all the Members of the various delegations—I know we will have it in South Carolina—to keep in mind as we deal with deficit reduction that if we want to make these investments in the future and get these incredible returns, we are going to have to pay attention to that portion of the budget that always seems to be the place we find easiest to cut, because entitlements are sticky, and we have got to get some tax cuts and we have all these other priorities.

This kind of program, public works, infrastructure, and I would think even within that category, the efforts to modernize our ports seem to be expendable. And I think that is a tragic reality we have all got to keep in mind.

And I don't want to pick on this particular delegation because I think you have always supported us. The Charleston Port is such a big regional asset, but it does cross my mind, and since we had a few minutes, I thought I would utter those concerns.

Thank you.

Mr. CLYBURN. Well, I assure you that I understand them and we appreciate your reminding us, but as I said at the outset, I would also appreciate if all of the considerations of the subcommittee, that we take a look at the request not so much as to what is embodied in them but also to recognize, or to even look at the communities that these requests are coming from and take into account what sacrifices many of these communities may be making in other areas.

As I indicated, Charleston is taking a big hit because of the 1993 round of base closings. And we would appreciate that kind of consideration being given, as you look at all of these requests.

And, of course, as Don has said, even beyond the port, South Carolina's resources may be limited but our—one part of it, water, is very plentiful and we need to keep it clean. We need to keep the—all the concerns with our water met because people there rely upon it in many other areas. And so many people who may not ever see the port still rely on our lakes for their everyday livelihood and we need to keep all of that into our thinking as we go forward with this, and I appreciate it.

Mr. FAZIO. Mr. Chairman, if I could just interject one more time.

Would it be possible to get into the record what the economic impact on South Carolina will be from the base closure you have experienced? I think it would be pretty significant.

Mr. CLYBURN. Yes.

Mr. FAZIO. It is a bit of a drawdown on your account, so to speak, as we look on where we need to make new emphasis.

Mr. KNOLLENBERG. So ordered. If you will put that in, that will be attached to the record.

Mr. CLYBURN. I will be glad to do that. Thank you so much.

Mr. KNOLLENBERG. Thank you, gentlemen.

[The information follows:]

JAMES E. CLYBURN
6TH DISTRICT, SOUTH CAROLINA

ZONE WHIP

'XECUTIVE COMMITTEE
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CO-CHAIR
ECONOMIC RENEWAL TASK FORCE

WELFARE REFORM TASK FORCE

COMMITTEES
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AND INFRASTRUCTURE
SURFACE TRANSPORTATION
AVIATION

VETERANS' AFFAIRS
EDUCATION TRAINING EMPLOYMENT
AND HOUSING

Congress of the United States
House of Representatives
Washington, DC 20515–4006

March 1, 1996

The Honorable John T. Myers
Chairman
Subcommittee on Energy and Water Development
House Committee on Appropriations
2362 Rayburn House Office Building
Washington, D.C. 20515

Dear Mr. Chairman:

During my appearance before the Subcommittee on February 28, 1996, I was requested to submit for the record information regarding the impact of the closure of the Charleston Naval Base upon the local economy. My source for this information is the Charleston Metro Chamber of Commerce. Pages 2 and 3 contain original estimates made in July, 1993. On page 4 you will find the economic impact through August, 1995, and pages 9 and 10 contain current estimates.

As you can see, Charleston has lost almost 22,000 direct jobs as a result of the navy base closure. The South Carolina State Department of Commerce uses a multiple factor of two in estimating the number of indirect jobs lost as a result of this action. Therefore, the Charleston area will see an employment decrease of 66,000. This area, which has been a leader in the defense of the nation, surely deserves the assistance of existing federal programs as it strives to overcome the closure of this naval facility.

I hope this information adequately responds to the Subcommittee's request. If additional material is needed, please do not hesitate to let me know.

With kindest regards, I am

Sincerely,

James E. Clyburn
Member of Congress

JEC:dc

Enclosure

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Original #s
July 1993

EMPLOYMENT IMPACT ON THE CHARLESTON AREA

of
Base Realignment & Closure Commission Decisions

FACILITIES TO CLOSE OR REALIGN:

	Active	Civilian	Contract	Total
Naval Station	14,990	1,071	93	16,154
Shipyard	64	5,000	0	5,064
Defense Distribution Depot	5	291	0	296
Supply Center	17	357	14	388
Total	15,076	6,719	107	21,902

ILITIES RETAINED OR EXPANDED:

	Active	Civilian	Contract	Total
NAVELEX	10	1,050	3,320	4,380
Shipyard	0	120	0	120
Supply Center	5	131	0	136
Hospital	898	427	204	1,529
Total	913	1,728	3,524	6,165

Direct employment figures are based on 1992 Shareholders Report, Charleston Naval Base, September 30, 1992 and current estimates based on force structure.

Source: Center for Business Research, Charleston Trident Chamber of Commerce, 6/93

CENTER FOR BUSINESS RESEARCH
Charleston Trident Chamber of Commerce, P.O. Box 975, Charleston, SC 29402
phone (803) 577-2510 fax (803) 723-4853

PAYROLL IMPACT ON THE CHARLESTON AREA

of

Base Realignment & Closure Commission Decisions ($000)

FACILITIES TO CLOSE OR REALIGN:

	Active	Civilian	Contract	Total
Naval Station	366,300	27,567	2,519	396,386
Shipyard	4,572	221,930	0	226,502
Defense Distribution Depot	233	10,047	0	10,280
Supply Center	1,017	9,606	426	11,049
Total	**372,122**	**269,150**	**2,945**	**644,217**

FACILITIES RETAINED OR EXPANDED:

	Active	Civilian	Contract	Total
NAVELEX -	436	48,258	127,267	175,961
Shipyard	4,572	5,326	0	9,898
Supply Center	299	3,525	0	3,824
Hospital	40,892	12,072	9,305	62,269
Total	**46,199**	**69,181**	**136,572**	**251,952**

Direct payroll dollars are based on 1992 Shareholders Report, Charleston Naval Base, September 30, 1992 and current estimates based on force structure.

Sources Center for Business Research, Charleston Trident Chamber of Commerce, 6/93

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Economic Impact on Charleston SC of the 1993 Naval Base & Shipyard Closure Announcement

History

Nearly a century ago, the United States Navy chose Charleston, South Carolina, as a strategic location for one of its prized naval shipyards. Established in 1901, the Charleston Naval Shipyard was the catalyst for a major naval complex which by the 1980's had developed into the Charleston Naval Base, the US Navy's third largest homeport.

In the 1970's, the United States' armed forces began gradually shrinking in size with the end of the US involvement in the Vietnam War and the beginning of more peaceful relations between nations worldwide. By the late 1980's with the end of the Cold War, the nation's Department of Defense (DoD) saw the need to actively downsize the magnitude of its armed forces and facilities. The DoD established a bi-annual military facility realignment and closure process to take place from 1989 through 1995, over which time all branches of service (Army, Navy, Air Force, and Marines, plus Reserve Units) would experience some type of realignment, consolidation, or even full closure of some facilities. The federal Base Realignment and Closure Commission (BRAC) was formed to decide on which American military facilities all over the world would be affected.

At the same time, the Charleston Metro Chamber of Commerce and area community leaders recognized that the Charleston area military facilities might be in danger during the BRAC closure rounds and began immediately preparing for the possibility of defending its military bases. The Chamber initiated a campaign with the mission to research, track and promote awareness of the importance of the area military facilities and their impact on the region's economy. By 1989, the military had become the Charleston metro area's number one employing industry with over 51,000 workers (20.6% of the region's total workforce) and an impact in excess of $4 billion. The Navy Base had the largest share of the impact with more than 45,000 employees--active and civilian.

Over the next few years, the Charleston military bases successfully avoided the BRAC's closure rounds. However, downsizing occurred regardless due mostly to nationwide changes in homeported ships and submarines, with some being transferred out of Charleston and some decommissioned. By the end of 1992, the Charleston Naval Base had already shrunk its employment by 21%, from 45,379 in 1989 to 35,656. The number of ships and submarines which called Charleston home, once numbering 70, was down to 57 by 1992.

Charleston Naval Base Employment Trends

	1989	1990	1991	1992	1993	1994	Aug '95	Apr'96
Active	28,547	27,562	26,214	22,131	14,859	13,449	9,600	4,089
Civilian	14,807	14,098	13,554	11,534	10,002	8,902	4,500*	3,792*
Contract	2,025	1,800	2,065	1,991	1,881	1,918	*	*
Total	45,379	43,466	41,833	35,656	26,742	24,269	14,100	7,881

*Contract civilian totals here are included in civilian employment.
Source: US Navy, Charleston Naval Base, 8/95.

- **Note**: 1993 was when the base closure announcement occurred. The estimated direct navy job loss at the time of the closure announcement totaled about 22,000 (active and civilian).

Total Announced New Federal Jobs for the Charleston Metro Area	# Estimated New Jobs
NISE-East and contract firms	3000
US Army Strategic Mobility Logistics Base	500-700
National Civilian Community Corps (Youth Corps)	50
N[illegible]al Oceanic & Atmospheric Administration (NOAA) Center	80
U[illegible]ate Department Regional Finance and Accounting Office	85
Dept. of Defense Finance and Accounting Center (DoDFAC)	525*
US Postal Encoding Center	450
US Naval Nuclear Power Training Command	500
US Justice Dept's Immigration & Naturalization Svc. Border Patrol	125
Total	5,515

* **Total DoDFAC jobs: 750. Of those 525 are new jobs to the Charleston area; 225 are already employed at the Charleston Naval Base.**

Source: Center for Business Research, Charleston Metro Chamber of Commerce, 2/96.

Charleston SC three-county metropolitan area employment trends:

Charleston Metro Area Employment Trends

	1989	1990	1991	1992	1993	1994	1995	%Chg 89-95
Civilian Labor Force	228,680	236,460	243,330	246,180	245,890	244,080	244,180	6.7%
Total Employment	219,190	228,440	232,070	232,620	229,570	229,090	232,130	5.9%
Unemployment (#)	9,490	8,020	11,260	13,560	16,320	14,990	12,050	
Unemployment (%)	4.1	3.4	4.6	5.5	6.6	6.1	4.9	

Source: *SC Employment Security Commission, Labor Market Information Division, 2/96.*

Note: *The above figures are civilian employment trends only and do not include the active military which are shown in the table showing navy base employment trends.*

Also, the Center for Business Research recorded the following new & expanding company announcements in the Charleston metropolitan area, creating the indicated number of jobs and capital investment for 1993, 1994, and 1995. Note, however, that jobs and investment are recorded in these totals when officially announced, not necessarily when operations begin:

	# new jobs announced by new companies to the Charleston region and existing area companies expanding	$ capital investment announced by new companies to the Charleston region and existing companies expanding
1993	4500	$231 million
1994	2372	$283.5 million
1995	7845	$1.2 billion

S *Center for Business Research, Charleston Metro Chamber of Commerce, 2/96.*

WEDNESDAY, FEBRUARY 28, 1996.

MYRTLE BEACH, CHARLESTON HARBOR AND GEORGETOWN HARBOR

WITNESS

HON. MARSHALL "MARK" SANFORD, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF SOUTH CAROLINA

Mr. KNOLLENBERG. The next witness this morning also from the great State of South Carolina is Mark Sanford.

Mark is here now, so if you will come forward. You are recognized for the few moments that you have. We are looking for your testimony.

Mr. SANFORD. All right.

Mr. Chairman, I would request that my written statement be included in the record.

I am here very briefly to talk about two projects. One is the Grand Strand Beach Renourishment Project which stretches on the northern section of my district, and the other is the sort of dredging-related activities in the Ports of Georgetown and the Ports of Charleston that Don Welch and Congressman Clyburn just mentioned.

I think that both the dredging-related projects and the Beach Renourishment Project are of regional and national interest. Therefore, I think that they are worthy of the consideration of this subcommittee.

Let me first touch on the Beach Renourishment Project. If you were to begin at the top, which is the North Carolina border, the Grand Strand stretches some 30, 40 miles south to roughly Georgetown, South Carolina. It is anchored by the Town of Myrtle Beach, but there are a number of smaller coastal communities that line the beach. What has happened is day-to-day erosion and major storms have eroded the beach to the point that at high tide in some areas and at low tide in other areas, there is no beach.

The U.S. Corps of Engineers recognized the difficulty that Myrtle Beach and the surrounding areas were going through and proposed the Beach Renourishment Project. It is a $54 million project. It is roughly half way completed, and I am simply here to urge the completion of that project.

I won't go through some of the numbers on that, but I think in this particular instance, beach renourishment makes sense for several reasons: First, it will work here. If you were to look at some of the smaller islands down here, beach renourishment would not work, because of very unstable sands and constant shifting. What the Corps has estimated is that erosion rates along the Grand Strand area are a foot or less per year, which makes this area a stable beach.

Mr. KNOLLENBERG. Mr. Sanford, just to interrupt, could we elevate that a little bit? I can't see the bottom of that.

Mr. SANFORD. Yes. The State has a responsible coastal zone management program in place. In fact, it is number one in the entire country. They have put in place strong setback requirements. They have eliminated erosion-causing beach obstacles. You can go down a number of things they have done proactively on their own and they have actually encouraged beach renourishment projects.

The community support would be tied in two ways: One is the Coastal Council, which is charged with the stewardship of the coastal zone, has endorsed this project and South Carolina over the last 15 years has contributed $50 million of its own funds towards beach renourishment.

Two, the Grand Strand, in essence, is one of South Carolina's biggest economic engines. Tourism is the second largest industry in the State of South Carolina. Two-thirds of all tourism revenues that go through the State of South Carolina come from the Grand Strand. If there is a detriment to the beach, it is detriment to the second largest industry in the entire State.

Third, it is a partnership between State and local governments with the Federal Government. Rather than saying simply to the Federal Government, "why don't you all take care of this," they have contributed a third of the cost already, and there is a continued partnership on behalf of both local and State governments.

Finally, it would lessen a fairly significant contingent liability that now rests with the Federal Government. An example of this would be the Corps of Engineers estimates that the project will have an average of $15.5 million annual benefit. There was a 1987 storm that caused damages between $260,000 and $760,000 per mile on unnourished beaches, while on nourished beaches, it was $40,000 per mile. So, I think it eliminates a fairly significant contingent liability.

Finally, I just want to touch on the port-related activity which Don Welch already addressed, and I think it's important again on a national basis. For the Port of Charleston to remain competitive, we need to deepen the channel.

You can see here on the right, in essence, this is to scale with the new super-ships that are now beginning to move around the seas, and notwithstanding a certain presidential candidate, exports are vital to this country's future. Whether it is out of your district or other surrounding States, 50 percent of GDP growth since 1986 has been due to exports, imports or exports-related activity.

Now that these larger ships are plying the ocean and now that industrialization has moved further West so that you have got ships going up to the Suez Canal and into the Southeast, Charleston is particularly well-poised and particularly competitive. We need help with the deepening.

Thank you for your time, sir.

[The statement of Mr. Sanford follows:]

The Grand Strand Beach Nourishment Project and South Carolina Port Dredging

Remarks by the Honorable Mark Sanford

Subcommittee on Energy and Water Development
February 28, 1996

Thank you, Mr. Chairman. I ask that my written statement be included in the record.

I am here to talk about a significant portion of the district that I represent, South Carolina's Grand Strand, that contains both national and regional interests. This area is a cluster of popular coastal communities that covers two counties and stretches 30 miles south from the North Carolina border. Myrtle Beach is the anchor community, but the smaller, neighboring coastal towns have their share of residents and visitors.

Storms and day-to-day erosion have drastically depleted the Grand Strand beaches. In many areas there is no beach at high tide or even at low tide.

The US Army Corps of Engineers has designed and is executing the Grand Strand beach nourishment project. The project's price tag is $54 million, and after the fiscal year of 1997, 83% of the federal share will be completed. The federal government will contribute $35 million, and local and state governments will contribute a total of $19 million. This money will pay for the nourishment of 25 miles of beaches with over 5 million cubic yards of sand.

My pledge of fiscal conservatism and responsible use of our economic resources is one of the primary reasons the citizens of my state sent me to Washington. Beach nourishment is not the solution to all of this nation's erosion woes, but this federal, state, and local partnership makes sense here in South Carolina for several reasons.

- For one, **beach nourishment will work here.** The beaches of the Grand Strand are stable; the average erosion rate is one foot per year. Beaches with high erosion rates are not good candidates for beach nourishment.

- Secondly, **the state has a responsible coastal zone management program in place**, one that has been rated number one in the country. We are doing a good job managing our coastal resources. Beach damaging erosion control structures are banned; reasonable ocean front setbacks are required; and beach nourishment is encouraged.

- **Grand Strand beaches represent an important portion of South Carolina's economic resources.** South Carolina's second largest business is tourism, and the Grand Strand accounts for a full one-third of this industry. Grand Strand tourism is an economic powerhouse, helping our state create more businesses, and even more importantly, new jobs.

- **The state and local governments are sharing in the cost.** While many government programs are being cut, beach nourishment is recognized as a wise investment and has the support of our citizens and elected officials.

- **This plan will lower the contingent liability of the government with respect to its Federal Flood Insurance Program.** According to Corps of Engineers estimates, this project will have an average $15.5 million annual benefit in terms of damage reduction. A good example of this benefit was an '87 storm in Myrtle Beach which caused damages of $260,000 to $760,000 per mile in unnourished beach areas and only $40,000 per mile in nourished beach areas.

To fully understand this project, you have to understand the Grand Strand and the tremendous, positive financial impact Grand Strand beaches have on South Carolina's economy. The popularity of South Carolina's coast has increased greatly in the past 15 years, making it our fastest growing region. The vacation industry is expanding rapidly, as are the benefits we reap from this enterprise.

- In 1995, visitors to the Grand Strand spent $ 2.5 billion, which amounted to a statewide impact of $6 billion.
- The Grand Strand tourism industry employs over 97,000 people who collectively earn an annual paycheck of $1.3 billion.
- Grand Strand tourism generated $139 million in state taxes in 1994, and there was a 12.5 % increase in this figure for 1995. This makes the Grand Strand one of the most significant pillars of our economy.
- This productivity should continue. Robust growth in the '70s and '80s has earned the Grand Strand a visitor base large enough to support new attractions and other forms of tourism-related business development.

The essential focus of this tourism industry is the Grand Strand beaches. The restaurants, entertainment facilities, and golf courses of the area add to the allure, but the beach is the central draw. Unfortunately, these beaches are in trouble. While our new coastal policies address this problem, for the time being, we have to live with the older buildings, the seawalls, the rock revetments and the troubles these structures bring. The Grand Strand's major attraction is washing away.

This erosion problem also costs the federal government money. Ocean front construction represents billions of investment dollars. After a minor hurricane, ocean front damages can cost a million dollars per mile to repair and rebuild. Since all of this property is insured through the federally sponsored flood insurance program, federal tax dollars are used every time a hurricane or brisk winter storm sweeps through.

The combination of a wide beach and a strong coastal zone management program is the only way we can protect our natural resources, our growing tourism industry, and federally insured ocean front construction.

South Carolina is doing its part. Tougher state laws are now on the books. Private property rights and the rights of the public to a healthy beach are given equal consideration. These laws require that destroyed structures be rebuilt on the landward side of the property, limit the size of structures, and prohibit the type of erosion control devices which often actually accelerate erosion.

South Carolina and its citizens have spent over $50 million in the past fifteen years on private and public beach nourishment projects throughout the coastal zone. The Grand Strand beach nourishment project would close the outstanding gap in South Carolina's coastal management program.

The project officially began in 1994. In the first year, $3 million was appropriated from the federal government and $10.5 million from the state of South Carolina. The Corps has finalized its plans, and is completing the process of securing easements for ocean front property owners. This is time consuming, but sand could be on our beaches by the winter of 1996 for the first two reaches. We need $13 million in the federal government's 1997 budget to continue with the Corps' plan.

The dredging of the Charleston and Georgetown Harbors is a vital function that is also provided by the Army Corps of Engineers. These two ports provide 78,000 jobs for the

area. These jobs resulted in $2.2 billion dollars in personal income, and $257.6 million in corporate, property, sales, excise and personal income tax revenues. Of South Carolina's $8.9 billion in sales revenue, $8.1 billion was attributed to the port users. The figures have not been officially released for the 1997 budget, but in 1995 the total cost of dredging the Georgetown and Charleston Harbors was $2.8 million and $4.2 million respectively. This is obviously a small price to pay for the return in tax dollars as well as jobs and revenue created by the port activities.

The Port of Charleston received funds to deepen its harbor in 1986 from 35 to 40 feet, and the port flourished as a result. From 1987 to 1994, Custom's receipts in the Charleston district were over $3 billion. Since that time the port has continued to grow significantly with the ongoing efforts to deepen the Charleston harbor again. It is very clear that the return from this investment is going to more than justify this proposal. These improvements are necessary in order to sustain the growth of this port that benefits not only my district, but also the exporters throughout South Carolina. As you might know exporters have a +60 % advantage in Charleston.

The Port of Charleston needs to continue to be deepened to keep up with newer and larger container ships. The new ships draw 41-46 feet of water, and this proposal will deepen the harbor from 40 feet to 45 feet. This program cost is unknown at this time, but the cost is to be a shared cost with non-federal dollars picking up around 35% of the total. This should be viewed as a basic maintenance cost on what is a national resource that creates jobs as well as revenues for the federal treasury.

Mr. KNOLLENBERG. Thank you.

Gentlemen, we appreciate the testimony. And I appreciate the graphics.

I guess in terms of comparable size, if you were to compare Charleston to Savannah in terms of the capacity currently and what the expected potential is, would you have any comment on that?

Mr. SANFORD. Charleston is the second largest container port in the entire East Coast, second only to the combined wards of New York and New Jersey—Newark and New York. So it is significantly larger in size because of the containerization. There is much more break-bulk traffic in and out of Savannah. Charleston is a containerized port.

Mr. KNOLLENBERG. In terms of nuclear waste, and I think one of the previous testifiers mentioned that, that has not happened yet, but Charleston was not considered?

Mr. SANFORD. No, Charleston is going—DOE has said that they are going to bring it through Charleston. Charleston is their choice, which, again, when you are measuring the whole notion of equalizing the basket, we hope that we—again, that is not your basket but I hope it will be taken into consideration.

Mr. KNOLLENBERG. Thank you, gentlemen.

Thank you very kindly.

Mr. SANFORD. Yes, sir.

WEDNESDAY, FEBRUARY 28, 1996.

WEST COLUMBUS FLOODWALL PROJECT

WITNESS

HON. DEBORAH PRYCE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO

Mr. KNOLLENBERG. We are going to deviate slightly, and in terms of getting on into the bottom part of this morning's session, we have got Congresswoman Deborah Pryce from Ohio. So it is appropriate for her now, if she would, to come forward and we will accept her testimony.

So Congresswoman Pryce.

Ms. PRYCE. Well, thank you very much, Mr. Chairman, gentlemen of the committee. It is a pleasure for me to be here.

This committee and staff is very familiar with this project because I have been here before, and I thank you for the opportunity to appear again in support of the West Columbus Flood Wall Project.

The Flood Wall Project continues to be critically important to the City of Columbus, Ohio. I testified in the past about severe damage done to my fair city by the floods of 1913, 1937 and 1959, when the Scioto River overflowed its banks and these disasters resulted in millions of dollars in damage to commercial and residential property, destruction of homes and businesses and the loss of many, many lives.

Today, Columbus continues to face the same threat of flooding. And each winter and spring the combined effects of snow and rainfall raise serious concerns, and especially this year when we have seen so much of it in other parts of the Nation.

The proposal to construct the flood wall in Columbus had its genesis in 1970 when the U.S. Army Corps of Engineers preauthorization studies to consider the problem. Following congressional authorizations in 1988 and 1990, groundbreaking for the initial phase of the Dry Run Levee took place in 1993. The project has advanced a very long way since then, and I am pleased to report the City of Columbus and the Army Corps dedicated Phase I of the Dry Run Levee in October of 1995.

This initial construction will strengthen the existing Dry Run Levee and install a flow control structure on the city sanitary sewers to prevent excess sanitary flows into the protected area during any flooding. Construction of Phase I B of the Dry Run Levee is underway and proceeding on schedule for completion by the fall of 1996. Proposals for construction of Phase II A, which extends the flood wall significantly, will be reviewed in March and construction will be underway by this summer.

Design work and real estate acquisition have already been completed for Phase II B and contracts will be awarded by this summer with construction to begin soon thereafter. Phase II B will include construction of a new storm sewer pumping station in Dodge Park to accommodate interior drainage from the flood protected area. The remaining portions of Phase II are in various stages of design.

To date, the flood wall construction has proceeded on schedule and reflected very smooth coordination between the Army Corps of Engineers and the City of Columbus. Substantial progress has been made for protecting Columbus, but there is much more to be done. And I urge your support for the $11.4 million included in the President's fiscal 1997 budget request for continued construction of the West Columbus Flood Wall.

This construction is critical to ensure protection from future flooding. There are 4,000 homes, 370 businesses, 26 industrial and institutional structures situated in this downtown area, including a 498-bed Mount Carmel Hospital, the Central Ohio Transit Authority, bus garage, et cetera, et cetera.

Completion of the flood wall construction will directly benefit businesses and residents of the entire City of Columbus, and both the city and State will have firmly supported this project for many, many years.

Mr. Chairman and Members of the subcommittee, I appreciate the opportunity to be here and would provide answers to any of your questions.

Mr. KNOLLENBERG. Any questions for Congresswoman Pryce?

No.

I guess there are none, so we can discharge you at this point. We appreciate your coming before the committee and providing that testimony.

Ms. PRYCE. Thank you very much. I appreciate your time.

Mr. KNOLLENBERG. Thank you.

WEDNESDAY, FEBRUARY 28, 1996.

CORPS OF ENGINEERS PROGRAMS

WITNESS

YVONNE ARCENEAUX, COUNCIL MEMBER, THIRD DISTRICT, CITY OF COMPTON, CALIFORNIA

Mr. KNOLLENBERG. Now we want to bring up the representative from the City of Compton, California.

I don't know, Mr. Fazio, if that is near you.

Mr. FAZIO. Well, California is a big State and we are really at the other end, but we are glad to have Compton represented. They don't have a Member of Congress at the moment and we look forward to that problem being resolved shortly, but we would certainly want to be helpful.

Mr. KNOLLENBERG. We didn't get your name. Would you kindly introduce yourself and your colleague?

Ms. ARCENEAUX. My name is Yvonne Arceneaux, Council Person of the Third District, City of Compton, and this is the City Manager, Howard Caldwell.

Mr. KNOLLENBERG. Very good.

You are recognized.

Ms. ARCENEAUX. Mr. Chairman and Members of the subcommittee, I am Yvonne Arceneaux, Third District Councilwoman for the City of Compton, California. I want to thank you for the opportunity to provide testimony on behalf of the city concerning the U.S. Army Corps of Engineers involvement in Compton on the Compton Creek.

Mr. Chairman, today I come before the subcommittee in hopes of resolving a long-standing issue that is critical—that is of critical importance to the people of Compton. Within the city's boundaries of Compton lies the Compton Creek Channel, a tributary to the Los Angeles River and part of the Los Angeles County Drainage Area. Maintenance of the creek has been the responsibility of the U.S. Army Corps of Engineers and the L.A. County Department of Public Works. Over the past several years, a portion of the creek under the maintenance and supervision of the Corps has deteriorated to such a state that it now poses a direct threat to the ecological environment and the City of Compton and the neighboring communities.

Nearly 10 years of undermaintenance, coupled with intermittent seasonal flows and unrestrained dumping has let the Corps-managed portion of the channel with accumulated sediment, debris, a thick mat of non-woody, weedy and monocot vegetation. The sediments and vegetative shoaling have threatened the channel's design ability to carry high flow to the L.A. River.

During January 1995, as a result of these circumstances, stormwater overlapped the channel banks, causing flooding in several areas surrounding lower Compton Creek. In addition to environmental hazards, the city was also concerned with the creek's adverse effect on economic conditions and health and safety of the surrounding neighbors.

Many residents have legitimate concerns about potential decrease in their property value. Due to the inadequate flood control, the infestation of rodents in the portion of the creek where there is vegetative shoaling has proven to be a proven problem—a particular problem for economic development near the creek.

The accommodated debris and vegetation has also harbored unsanitary conditions in the creek. In addition to becoming a feeding ground for mosquitoes and rodents, it has also become a dumping ground for dead animals, abandoned cars and other waste.

In 1994, the city attempted to rally the community to try to clean up portions of the creek. The cleanup had to be cut short because of the overpowering stench from the channel had caused problems for many of the residents, including Omar Bradley, the Compton Mayor. He became very, very ill after trying to clean up that canal with a number of other residents during that time.

In the spring of 1995, the city combined efforts with a local environmental group, and that was the Friends of the L.A. River, once again to attempt to clean up the portions of the creek. There was a significant show of support by city residents but the energy, the trash bags and the garden tools were not enough to tackle this arduous task.

In 1987, the city has sought to work with the Los Angeles District Army Corps of Engineers in an effort to clean up the creek. From day one, the Army Corps of Engineers has accepted the responsibility to clean up their portion of the creek. However, while it is true the Corps has proven—provided maintenance in the area over this period of time, it has proven to be insufficient and ineffective.

In the fiscal year 1994, funds had been provided for the removal of the vegetation and debris from the creek but the monies were deferred to repair flood damage to the Corps' project in Arizona.

In 1994, with the help of various Members of Congress, the city was able to facilitate a meeting between the Corps and the county to establish a comprehensive plan that would provide for a major one-time clean-up of the sediment and shoaling, and for an adequate ongoing maintenance operation of the creek.

Officials from both sides acknowledged the need for a clean-up and agreed the facilitation of the clean-up should begin immediately. Three months later, following the flooding in January, a scope of work was put together by the Corps identifying their approach to clean up the sediment and vegetation shoaling. Seven months passed before the city heard from the Corps regarding the environmental assessment. The assessment also called for a major clean-up of the creek to ensure proper flood control and to reduce health and environmental risks. Another 3 months after this assessment, tests—assessment, tests of the sediment for the Corps portion of the creek revealed yet another problem, hazardous traces of lead.

Mr. Chairman, the city is at its wit's end. It is in this vein that we are asking that the committee provide $500,000 and to direct the Corps of Engineers to perform a major one-time clean-up of the creek sediment and vegetative shoaling and to work with the city to establish an adequate ongoing maintenance program. It is Compton's intent to work with the Corps to achieve a desirable result. With the committee's help, I believe it can be—it can happen.

Mr. Chairman, this concludes my testimony.

I again thank you for the opportunity to appear before you today and I will be happy to answer any questions that you may have.

[The statement of Ms. Arceneaux follows:]

TESTIMONY OF

YVONNE ARCENEAUX
COUNCIL MEMBER, THIRD DISTRICT

THE CITY OF COMPTON
COMPTON, CALIFORNIA

PRESENTED BEFORE

THE UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER

FEBRUARY 28, 1996

Mr. Chairman, Mr.Bevill, and other Members of the subcommittee, I am Yvonne Arceneaux, Third District Councilwoman from the City of Compton, California. I want to thank you for the opportunity to provide testimony on behalf of the City concerning the U.S. Army Corps of Engineers' involvement with the Compton Creek. Joining me this morning is Mr. Howard Caldwell, the City Manager of Compton.

Before discussing the issue of Compton Creek, I first would like to add my name to the list of persons who are saddened by the departure of both you and the ranking member at the end of this session. On behalf of the City of Compton, I want to congratulate you both for your dedication and service to the subcommittee and for promoting a just, bipartisan approach to the appropriations process. The City wishes you and Mr. Bevill much success in your future endeavors.

Mr. Chairman, The City of Compton is a strong, resilient community fifteen miles south of downtown Los Angeles, with a solid heritage spanning 107 years. These 107 years have brought the winds of change and sometimes adversity, but the citizens of Compton have displayed a remarkable ability to overcome each hardship with new resolve and determination. Many outside our city are unfamiliar with the full breadth of our story. Some only remember Compton as being one of the areas that experienced civil unrest following the Rodney King trial; while others identify the City only with crime and gang activity. There is, however, another side to the story. The vast majority of Compton's 91,000 residents are hardworking, law-abiding citizens who are dedicated to uplifting the community. Their actions have left an indelible impression on the fabric and structure of the City. As a result of this type of community involvement, Compton has experienced a reduction in violent crime and gang-related activity in recent years. Moreover, the year following the civil unrest, Compton was named as one of the top 25 large metropolitan submarkets in the United States for economic development.

Mr. Chairman, today, I come before the subcommittee in hopes of resolving a long-standing issue that is of critical importance to the people of Compton. Within the city boundaries of Compton lies the Compton Creek channel, a tributary to the Los Angeles River and part of the Los Angeles County Drainage Area. Maintenance of the Creek has been the responsibility of the U.S. Army Corps of Engineers and the L.A. County Department of Public Works. Over the past several years, the portion of the Creek under the maintenance supervision of the Corps has deteriorated to such a state that it now poses a direct threat to the ecological environment of the City of Compton and neighboring communities.

Nearly ten years of undermaintenance, coupled with intermittent seasonal flows and unrestrained dumping, has left the Corps-managed portion of the channel with accumulated sediments, debris and a thick mat of non-woody, weedy and monocot vegetation. These sediments and vegetative shoaling have threatened the channel's design ability to carry high flows to the L.A. River. During January 1995, as a result of these circumstances, stormwater overlapped the channel banks, causing flooding in several areas surrounding lower Compton Creek. In addition to environmental hazards, the City is also concerned with the creek's adverse effect on economic conditions and the health and safety of the surrounding neighborhoods. Many residents have legitimate concerns about a potential decrease in their property values, due to the inadequate flood control. The infestation of rodents, in the portion of the creek where there is vegetative shoaling, has proven to be a particular problem for economic developments near the creek. Immediately adjacent to this portion of the creek is the location of one of the City's most significant redevelopment projects; the Renaissance Hotel project. Rodent infestation was a problem for the previous property owners, and to the extent that the problem persists, the success of the Hotel project could be compromised.

The accumulated debris and vegetation has also harbored unsanitary conditions in the creek. In addition to becoming a feeding ground for mosquitoes and rodents, it has also become a dumping ground for dead animals, abandoned cars, and other waste. In 1994, the City attempted to rally the community to try and clean up a portion of the creek. The clean-up had to be cut short, because of the overpowering stench from the channel and because a number of residents, including Omar Bradley, the Mayor of Compton, became very ill from direct contact with the creek. In the spring of 1995, the City combined efforts with a local environmental group to once again, attempt to clean up a portion of the creek. There was a significant show of support by city residents, but the energy, trash bags, and garden tools were not enough to tackle this arduous task.

We are also concerned for our children's sake. Within a two mile radius there are a number of elementary and high schools and the potential for serious injury exists if these children should happen to stray into the creek. In several locations, the fencing along the creek has been torn down and not repaired, providing an invitation to children to enter the creek right-of-way. Furthermore, the City has been informed that the current height of the fencing along the creek, three feet, is no longer the standard fence height, and should be replaced with fencing five feet in height. The Corps has indicated that they are designing fencing alternatives. However, after almost ten years, nothing has been implemented.

Since 1987, the City has sought to work with the Los Angeles District Army Corps of Engineers, in an effort to clean up the creek. From day one, the Army Corps of Engineers has accepted the responsibility of the clean-up of their portion of the creek. However, while it is true the Corps has provided maintenance in the area over this period of time, it has proven to be insufficient and ineffective. In Fiscal Year 1994, funds had been provided for the removal of vegetation and debris from the creek, but were deferred to repair flood damages to Corps projects in Arizona.

In 1994, with the help of various Members of Congress, the City was able to facilitate a meeting between the Corps and the County to establish a comprehensive plan that would provide for a major one time clean-up of the sediment and shoaling, and for an adequate on-going maintenance operation of the creek. Officials from both sides acknowledged the need for a clean-up and agreed that facilitation of the clean-up should begin immediately. Three months later, following the flooding in January, a scope of work was put together by the Corps identifying their approach to the clean-up of the sediment and vegetative shoaling. Seven months passed before the City heard from the Corps regarding the environmental assessment. The assessment also called for a major clean-up of the creek to ensure proper flood control and to reduce health and environmental risks. Another three months after this assessment, tests of the sediment in the Corps portion of the creek revealed yet another problem: hazardous traces of lead.

Mr. Chairman, the City is at its wits end. Compton has used numerous city resources that would otherwise have been used to fulfill the City's responsibilities to its taxpayers to deal with an issue that has grown out of control. The presence of lead is just one more reason why the Corps needs to quickly and effectively take care of their responsibilities to the creek. In this vein, the City of Compton asks that within the FY97 Energy and Water Appropriations bill, the Committee provide $500,000 and direct the Corps of Engineers to perform a major one-time clean-up of the creek sediment and vegetative shoaling, and to work with the City to establish an adequate on-going maintenance program. It is Compton's intent to work with the Corps to achieve a desirable result. With the Committee's help, I believe we can make it happen.

Mr. Chairman, this concludes my testimony. I again thank you for the opportunity to appear before you today and I will be happy to answer any questions you have at this time.

Mr. KNOLLENBERG. Any questions for Ms. Arceneaux?

We do appreciate your testimony.

Mr. Fazio.

Mr. FAZIO. I just wondered, is this in addition to what you may anticipate being in the budget? Is this an add-on, as we call it, or do you have any information that this might be in the Corps' budget this year?

Ms. ARCENEAUX. We are hoping that it will be in the Corps' budget this year.

I would like to add also, we have 26 schools in the Compton Unified School District and many parks sit very near the canal area and our children are exposed to this lead that they have found from the testing, and so I hope that you see this as an emergency, as we see it.

Mr. FAZIO. It sounded that way. And I am hoping that the administration will, too. I hope you are addressing the Corps of Engineers directly as well.

Ms. ARCENEAUX. I have had numerous conversations, numerous correspondence, but to no avail, sir.

Mr. FAZIO. Well, hopefully while you are in Washington you may go over the heads of your regional office and talk directly to the people here.

Ms. ARCENEAUX. Appreciate your time.

Mr. FAZIO. Be happy to help you facilitate that.

Ms. ARCENEAUX. Thank you.

Mr. KNOLLENBERG. Thank you for coming in. I appreciate the commentary and the testimony.

And I think at this point I am going to yield to Mr. Frelinghuysen, who wants to make—recognize an individual.

Mr. FRELINGHUYSEN. Thank you, Mr. Chairman.

Congressman Mendendez had submitted a written statement for the record, which I would like incorporated, if at all possible with the New Jersey portion that was earlier given this morning.

Thank you.

Mr. KNOLLENBERG. The inclusion will be made.

Thank you, Mr. Frelinghuysen.

WEDNESDAY, FEBRUARY 28, 1996.

SHORE PROTECTION PROJECTS

WITNESS

KENNETH J. SMITH, PRESIDENT, NEW JERSEY SHORE AND BEACH PRESERVATION ASSOCIATION

Mr. KNOLLENBERG. I think that we are down to the last individual to testify this morning.

We have with us the gentleman from the New Jersey Shore and Beach Preservation Association.

I should probably have let you make the introduction, Rod, but Mr. Kenneth Smith is with us.

So, Mr. Smith, you are on.

Mr. SMITH. Thank you.

Let me first say hello to Congressman Frelinghuysen, who has done yeoman service for our Coast of New Jersey. We are all very proud of him.

I want to thank this committee for again allowing me to testify on the Shore Protection Mission of the Corps. I was down here last year to talk with you about it and we were very pleased with the strong statement that went into the committee report regarding this.

We thought it was quite clear, the language that you put in. And as my colleagues around the Nation and I, over the last year, have assembled economic arguments, campaigned, lobbied, cajoled, tried to come at this from a number of different areas, we have not been able to get the administration to reverse its policy.

What I am including with my testimony at the back page, and I will go to the last two sentences, is a memo from Dr. Ed Dickey, who is the Chief of the Planning Division of the Corps at their headquarters, basically said the shore protection policies is an across-the-board withdrawal of Federal participation in new projects. Despite objections, the fiscal year 1996 policy can be expected to be extended.

You have heard a litany, I think, today of projects that have been put on hold. Local sponsors have been told they are not going to be constructed. They were left hanging.

Beginning in 1998, plans are for the deletion of Federal funding for operations and maintenance for over 500 small craft harbors and inlets, including every shallow draft inlet and harbor in New Jersey and virtually every one in Virginia, Florida and California. You heard the New Jersey delegation today testify on New Jersey's behalf for their coast, and I certainly support their testimony.

Other areas are really feeling the impact. Virginia Beach, years of planning, already to go to their hurricane project construction, they are being told that they don't fit the guidelines.

In the interest of brevity, I am not going to throw a lot of facts at you, but one thing that has recently come to us regards Federal taxes that are generated by projects. For example, the Federal taxes generated from foreign tourists visiting Miami Beach are over $130 million annually, were about 65 times the Federal share of the capitalized annual cost of the Miami Beach Nourishment Project. From that one project alone, the annual Federal tax revenue from foreign tourists alone is more than six times the amount that the Nation has spent per year to restore all of its beaches. That is Federal costs.

Miami Beach is the best example. New Jersey has a $12 billion coastal tourism industry, it is a huge industry, along with most of the coast. And I think that what is not understood is that much of the tourism dollar does not stay in these coastal communities. It goes to ancillary businesses, from Burger Kings to swimsuit manufacturers, to Exxon, to businesses all over the country.

The multiplier effects of coastal tourism revenues keep a lot of people working, and I believe that the Federal role in maintaining beaches as infrastructure should not be abrogated. I would just offer a couple of suggestions as to how the committee could help us continue this program.

Last year, you directed the Secretary of the Army to continue to process all decision documents, including transmission and feasibility reports, to the Congress. Perhaps you could also require a notification to Congress of all projects which are justified, and these are the three main things they are justified on: Economically, environmentally and engineering-wise, but which are declined or delayed due solely to the administration's new policy.

Since the administration has expressed its intention to continue the new policy, perhaps a congressional review of that policy is called for, because the potential for this policy to do serious harm to the Nation's economy, I believe, justifies such an investigation. And it is an opportunity to take a good look at the economics of coastal tourism, to examine whether beaches should be treated as important infrastructure just like roads or bridges.

I guess since I am not running, this is easy for me to make my third suggestion, and that is to look at cost-sharing. Clearly, we are looking—everything is on the table, and in this regard, I think—I would much rather discuss cost-sharing reductions than jettisoning the whole program. I believe that if we go below 50/50, it is just not going to be affordable for coastal communities, but there may be ways that we can review that in the future.

I trust that you will continue to recognize the value of the programs. I hope you will carefully consider projects that are added in.

Let me just say that the National Research Council's Marine Board has just completed a 3-year study of Beach Nourishment and Protection. It is an excellent study. Their report is balanced. Even the detractors of beach protection were in there. They have some recommendations which are in my testimony.

And, Congressman Fazio, let me say that your comments were well taken regarding the discretionary spending. You know, to pay for all of these programs, we first have to make the money. And I firmly believe that if we neglect our infrastructure, we are going to have a serious payback in the future.

So I want to thank you for hearing my testimony, and I would conclude it now.

[The statement of Mr. Smith follows:]

NEW JERSEY
SHORE AND BEACH
PRESERVATION ASSOCIATION
A SECTION OF THE AMERICAN SHORE AND BEACH PRESERVATION ASSOCIATION

STATEMENT

OF

KENNETH J. SMITH, PRESIDENT

NEW JERSEY SHORE AND BEACH PRESERVATION ASSOCIATION

BEFORE THE

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

OF THE

COMMITTEE ON APPROPRIATIONS

UNITED STATES HOUSE OF REPRESENTATIVES

ON FEDERAL SHORE PROTECTION PROJECTS ADMINISTERED BY

THE U.S. ARMY CORPS OF ENGINEERS

FEBRUARY 28, 1996

P.O. BOX 475, SHIP BOTTOM, NJ 08008
609-597-8507 609-698-3971

Mr. Chairman and members of the Subcommittee, I am Kenneth J. Smith, President of the New Jersey Shore and Beach Preservation Association. I am pleased to be here today to testify, as I did last year, in support of the continuation of the Corps of Engineers' shore protection programs, and for the security of their commitments to states and local governments to restore and to maintain their beaches.

I want to thank you, Mr. Chairman, and this committee for again allowing me to testify on this important issue, and for the strong support you gave to shore protection programs in last year's committee report. It was a direct and unequivocal defense of coastal residents and communities who depend on their partnership with the Federal government, and who return so much in revenue and taxes for the minimal Federal investments they require.

The report language was, I thought, quite clear. As my colleagues around the nation and I spent the last year assembling economic arguments, working with coastal congressional coalitions, lobbying, cajoling, trying to get the Administration to reverse its new shore protection policy and restore the shore protection program, we thought that a campaign waged from so many vantage points would be successful. Unfortunately, we have not convinced the Administration to even reconsider its position.

I offer to your committee a memo from Dr. G. Edward Dickey, Chief of Planning in the Corps' Washington headquarters, which was distributed at a Coastal Engineering Research Board meeting last Fall. It's not a long memo, but we can go right to the two last lines. Dr. Dickey states, "The shore protection policy is an across-the-board withdrawal of Federal participation in new projects. Despite objections, the FY96 policy can be expected to be extended".

The Administration stated last year that it would shortly introduce legislation to formalize the elimination of beach erosion control from the Corps' mission. It has not. What it has done is to embark on an internal implementation of the policy, in order to quickly reduce the operations level and the procedural capability of District offices to process the phases of study, design and construction of shore protection projects.

Projects which are otherwise justified have been put on hold, and the local sponsors are told they will not be constructed, due to the Administration's new policy. Ongoing projects or studies are to be funded to completion, so far, but new studies or construction starts are stopped cold.

Extensions of projects, with eminently justified benefit/cost ratios, are declined. Studies are left hanging, incomplete with no intent to finish them. Districts and customers are told that nothing new will be funded after FY96. Beginning in 1998, all Federal operations and maintenance funding is to be eliminated for over 500 small craft harbors and inlets, including every shallow draft inlet and harbor in New Jersey, Virginia, Florida and California.

In New Jersey last year only one study, the proposed Feasibility phase study for Long Beach Island, was deleted from the President's budget request. With your help, Mr. Chairman, and that of our congressional delegation that study was added in. This year, because of the continuation of the Administration's policy, over half of our shoreline projects are in jeopardy. Officials of the State of New Jersey are here today to testify as to the State's intent to cost-share those studies and projects, and I respectfully ask your help to keep them on track.

Many areas of the coast are feeling the impact: Virginia Beach, for example. After years of planning and commitment to their Hurricane and Storm Damage Reduction Project at last they're ready for construction funding and they're being told that regrettably they don't fit the new policy's guidelines. Florida, the Carolinas, the south shore of Long Island: all are in danger of shutting down their Federal shore protection programs.

In my testimony last year I provided data to the committee on the economic benefit of maintaining beaches. That data is still good. In fact the figures are even better this year, particularly regarding foreign tourist spending at our beaches. For example, the Federal taxes generated from foreign tourists visiting Miami Beach are over $130 million annually, or about 65 times the Federal share of the capitalized annual cost of the Miami Beach-nourishment project. From that one project alone the annual Federal tax revenue from foreign tourists alone is more than six times the amount the nation spends to restore all of its beaches.

Miami Beach is the best example of the value of beaches in generating revenue. New Jersey's $12 billion coastal tourism industry, the revenues of Virginia Beach; Ocean City, Maryland; the Carolinas, Long Island: these areas produce significant tax revenue for the Federal government. What needs to be understood is that much of the tourism dollar does not stay in those coastal communities. It accrues to businesses throughout the nation, from Burger Kings to Exxon to swimsuit manufacturers.

The multiplier effects of coastal tourism revenues keep a lot of people working, and the Federal role in maintaining the beaches as infrastructure should not be abrogated. I offer the following suggestions as to how this committee can help us continue the program.

1. Last year's report directed the Secretary of the Army through the Chief of Engineers to proceed with authorized and funded projects. The Committee also directed them to "continue to process all decision documents, including the transmission of feasibility reports, to the Congress for authorization, without regard to whether or not projects comply with the Administration's proposed new policies".
The Committee should also require a notification, to Congress, of all projects which are justified economically, environmentally and engineering-wise, but which are declined or delayed due to the Administration's new policy.

2. Since the Administration has expressed its intention to continue the new policy, perhaps a Congressional review of the policy is called for. The potential for this policy to do serious harm to the nation's economy justifies such an investigation. It's an opportunity to take a good look at the economics of coastal tourism, and to examine whether beaches should

be treated as important infrastructure, no less deserving of funding than roads and bridges.

3. Mindful of the need to reduce the budget, I suggest a review of the cost-sharing requirements set forth in the 1986 Water Resources Development Act. The coast should not receive any less, percentage-wise, than other civil works interests, e.g. flood control, inland waterway maintenance. Projects that have moved forward based on today's cost-sharing should not have that ratio altered.

To go below a 50/50 ratio would kill the program for many communities, but I would rather discuss some reduction in Federal spending than a jettisoning of the entire program. Further, communities which implement extra hazard mitigation programs should qualify for a higher Federal funding percentage, up to 65%.

4. The Committee will, I trust, continue to recognize the value of shore protection programs. If each year brings a host of added projects which should have been in the Administration's budget, as it appears will happen, I hope the Committee will carefully consider many of these as the ongoing projects and studies which they are, and fund them.

5. The National Research Council's Marine Board has just released a report, Beach Nourishment and Protection, after a three year study of the state-of-the-art of shore protection technology. It is an excellent, comprehensive examination of the issue which offers a number of suggestions to optimize the technology and to reduce the processing time of Corps' of Engineers projects.

Among their recommendations are:

A. Revise the Federal approval process to streamline approvals and funding time frames;

B. Increase the level of contracting for technical services by consultants to the Corps of Engineers.

C. Modify the laws and regulations to make Federal funding for locally constructed Federal projects available upon approval of pre-construction engineering and design by the Assistant Secretary of the Army for Civil Works.

The Corps process takes too long, and there are many areas which need to increase their efficiency. Perhaps an independent review of Corps procedures is overdue. The Corps has an excellent program, with the capability to resolve the many engineering, environmental and economic issues related to shore protection. One its current slogans is that it wants to be "America's Coastal Engineer". That's fine, as long as the funding continues. Without the funding, we have plenty of competent coastal engineers of our own.

Thank you for hearing my testimony today on this critically important issue for our coast.

Kenneth J. Smith, President, NJSBPA

Current Corps Policy on Shore Protection Projects

Dr. G. Edward Dickey
Chief, Planning Division
Headquarters, U.S. Army Corps of Engineers
Washington, D.C.

Earlier this year, the Administration adopted a new policy that would end the Corps' involvement in any future shore protection projects. The FY96 budget that was submitted to Congress included no new study or construction starts.

However, the appropriations bills that are in conference at this time include new study and construction starts. We do not know how the President will respond if these new initiatives remain in the bill. Both versions of the bill contain strong language rejecting this new policy.

At the same time the shore protection policy change was announced, the Administration announced a new policy for flood damage reduction projects that included specific criteria for Federal involvement. When this policy was attacked, the Administration agreed to review the policy and is now developing a new one. The shore protection policy is an across-the-board withdrawal of Federal participation in new projects. Despite objections, the FY96 policy can be expected to be extended.

Mr. KNOLLENBERG. Mr. Smith, thank you very kindly.

I think Mr. Frelinghuysen has a question for you.

Mr. FRELINGHUYSEN. Certainly I want to recognize the fact that you have New Jersey in your name, but you have provided, I think, the committee with an overview which is all encompassing, California, the shores of Lake Michigan.

Mr. SMITH. We are a section of American shore beach.

Mr. FRELINGHUYSEN. Yes, it's wonderful.

Mr. SMITH. And I believe our president is coming in to testify, I believe, next week.

Mr. FRELINGHUYSEN. Certainly all of our committee Members want to thank you for your time and overview. You have really done your homework, which I think is very important to this committee.

Mr. KNOLLENBERG. I think that concludes.

Mr. Fazio, do you have any final comments?

Mr. FAZIO. No.

Mr. KNOLLENBERG. Mr. Frelinghuysen?

Mr. FRELINGHUYSEN. No.

Mr. KNOLLENBERG. This then will be an adjournment until 2:00 p.m. today. So we look forward to resuming things then at 2:00.

Thank you.

This concludes this session.

WEDNESDAY, FEBRUARY 28, 1996

GARRISON DIVERSION UNIT, NORTH DAKOTA

WITNESSES

DAVID A. SPRYNCZYNATYK, STATE ENGINEER, NORTH DAKOTA; SECRETARY, NORTH DAKOTA WATER COMMISSION
ROBERT STRAND, GARRISON DIVERSION CONSERVANCY BOARD
JESSIE TAKEN ALIVE, CHAIRMAN, STANDING ROCK SIOUX TRIBE

Mr. FRELINGHUYSEN [presiding]. The meeting will come to order.

I am Rodney Frelinghuysen from New Jersey. I hope to be joined by other Members as we go through the hearing this afternoon.

Mr. Sprynczynatyk, how is that for pronunciation?

Mr. SPRYNCZYNATYK. That is very good.

Mr. FRELINGHUYSEN. State engineer for the State of North Dakota.

How many letters are in that name?

Mr. SPRYNCZYNATYK. Same number as in yours, sir.

Mr. FRELINGHUYSEN. I like that. Just don't ask me to pronounce it again.

Thank you for being with us, and you brought somebody with you.

Mr. SPRYNCZYNATYK. Yes, I did. And we hope that Congressman Pomeroy will join us momentarily. He is going to try to be here.

Mr. FRELINGHUYSEN. He may.

And let me say for the record, any prepared statement, especially those that are lengthy, we will be happy to include in toto in the transcript. So anything you could do to summarize, and brevity is the key to longevity.

Mr. SPRYNCZYNATYK. We will do that.

I have also brought for the record, testimony on behalf of the North Dakota Rural Water Systems Association and the North Dakota Water Coalition, and that has been given to the clerk.

[The information follows:]

TESTIMONY OF

Dave Koland, Executive Director
North Dakota Rural Water Systems Association

to the House Subcommittee
on Energy and Water Development
Garrison Diversion Unit

February 28, 1996

Mr. Chairman and Members of the Subcommittee:

My name is Dave Koland, Executive Director of the North Dakota Rural Water Systems Association. The 24 operating rural water systems in North Dakota provide bulk water service to 62 cities and direct hookups in 110 additional communities. The total city and rural population served is over 95,000.

In the early 1940's there were predictions that the Great Plains would soon be an empty wasteland. The young people had left to fight in WWII or work in the defense factories on the west coast and the Dust Bowl of the 30's was still fresh in everyone's mind.

A plan to repopulate the Great Plains was devised in Washington--it was known as the Pick-Sloan Plan. A series of dams would be built on the Missouri River and water for irrigation would be diverted to make the Great Plains a haven for labor intensive irrigated farms.

Today we are seeing the predictions of an empty wasteland come true! To quote the October 15, 1995, NEW YORK TIMES MAGAZINE: "The Great Plains are emptying out. What remains is a region populated increasingly by lonely old women and sustained by farm programs, Social Security and Medicare."

Census data tends to support the empty part. The Census Data Center in Fargo predicts continued growth in Fargo & Grand Forks--Stability in Minot and Bismarck but overall a population loss of at least 9000 and maybe as much as 35,000 people in the next 15 years. That predicted loss will obviously be in rural North Dakota. How do we change that??

Page Two..

How do we replace the multitude of farmers using irrigation that Pick-Sloan envisioned?

You are right if you are saying to yourself that there is no ONE answer!! A great many things must come together to make North Dakota's economy grow. But the single resource that everyone needs is WATER. It services our schools and hospitals, supplies our industries, waters our crops, sustains us all. It is a common bond, the single most important resource in growing communities.

Let me quote the NEW YORK TIMES MAGAZINE again: "People will return to the rural Great Plains only if they want to live here."..."What would you get? Clean air, good schools, no crime, no traffic jams, people who are so friendly that it takes some getting used to."

Here's what we've discovered with rural water. People like to live on a few acres in a rural setting! Our fastest growing areas are around the major cities. In southeast North Dakota we are also finding that small towns with good water have become BEDROOM communities not only for the larger cities, but also for the Melroe's, the sugar beet plants, the sunflower plants, and they will be for our latest venture PRO GOLD.

Towns once populated with widows and retired farmers are now having to deal with a growing school age population. Abandoned farms that have a rural water hookup are being rented or sold to commuters while those without good water stand empty. Those with water have in fact become "bedroom farms".

The QUALITY OF LIFE we offer in North Dakota is a rare commodity. Our nation is faced with a population fleeing the problems of the cities. The American dream of a home in the suburbs has been replaced by a "home in the country".

More will come if we provide the opportunity. We have much of what it takes in place. The roads, the communications, the energy, the schools, everything except WATER! North Dakota has an abundant supply of water but just not in the right place. The Northwest Area Water Supply (NAWS) project will help change that.

Minot has reached out to the rural areas with their MAGIC FUND and supported economic development efforts in the surrounding area. They have also agreed that the water rate for delivery of NAWS water beyond Minot will be the same as for delivery to Minot. They have demonstrated to the rest of North Dakota that economic survival of a major city depends on more than just what happens inside its city limits.

If the rest of North Dakota continues to ignore what is happening in the small towns around our major cities then all of us will eventually suffer. We must help the rural areas change from being just a support base for wheat farmers to a support base for jobs creation. If we do nothing the predictors will probably be right--we will become a state of old people--destined for oblivion when they pass on.

We can change that--in northwest North Dakota the Magic Fund has proven that rural and urban can work together for mutual benefit. In southeast North Dakota we have seen the impact of providing good water to rural areas and witnessed the dramatic change in small communities. If we combine the Magic Fund concept with a regional water delivery system--in 15 years the predictors of doom will look like fools.

Water ALONE will not bring people back to rural North Dakota but without WATER there is little hope that any proposed solution will work!

North Dakota
WATER
COALITION

1501 North 12th Street
Bismarck, ND 58501
(701)223-4615
FAX (701)223-4645

MEMBERS

Associated General Contractors of North Dakota

Cass County Joint Water Board

City of Fargo

City of Grand Forks

City of Minot

City of Williston/Upper Missouri Lake Sakakawea Planning Council

Devils Lake Joint Water Board

Devils Lake Preservation Coalition

Garrison Diversion Conservancy District

Greater North Dakota Association

James River Basin Coalition

Lignite Energy Council

North Dakota Association of Counties

North Dakota Association of Rural Electric Cooperatives

North Dakota Atmospheric Resource Board

North Dakota Education Association

North Dakota Farmers Union

North Dakota League of Cities

North Dakota Rural Water Systems Association

North Dakota State Water Commission

North Dakota Water Resource Districts Association

North Dakota Water Users Association

North Dakota Weather Modification Association

Red River Joint Water Board

Souris-Northwest Joint Water Resource Board

Southwest Water Authority

West River Joint Water Board

North Dakota Water Coalition Testimony

Before the House Subcommittee
on Energy and Water Development
Garrison Diversion Unit

Date: February 26, 1996

To: Mr. Chairman and Members of the Subcommittee

From: Dennis Hill, Chairman, ND Water Coalition

Thank you for the opportunity to appear before you to discuss North Dakota's water supply shortages.

North Dakota is facing several major water issues. They include:

1. Devils Lake water levels.
2. Water supply needs of the Red River Valley.
3. Water needs for high-value agriculture production and processing.
4. Completion of the NAWS project to provide water for northwest North Dakota.
5. Completion of the Southwest Pipeline Project to provide water for southwest North Dakota.
6. Construction of rural water delivery systems.
7. Water for James River Oakes Test Area.

We must find a way to address our water infrastructure needs. Otherwise, as we enter the next century, we will find ourselves dealing with each issue in a crisis mode, such as we are now required to do with Devils Lake, rather than with foresight and careful planning.

For example, if we do not find a way to provide water to the Red River Valley, we will face a similar crisis when a dry cycle occurs or when another ag processing opportunity presents itself.

We are at a crossroads in our state's history concerning water infrastructure. The projects that must be undertaken to assure adequate quantity and quality of water for our state are enormous. Garrison Diversion is the only real solution for Devils Lake stabilization, NAWS, Southwest Pipeline Project, water for the Red River Valley, water for the Oakes Test Area, and water for high-value agriculture production and processing.

It is requested that Congress continue to fund this critical water supply project for North Dakota. We have sacrificed over 500,000 acres of land for Missouri River flood protection and hydro-power generation, and we deserve some small compensation for our sacrifice. Please support appropriations to complete this project.

Mr. SPRYNCZYNATYK. For the record, my name is Dave Sprynczynatyk. I am the North Dakota State Engineer and the Secretary to our State Water Commission.

Thank you for the opportunity to be here today representing North Dakota Governor Ed Schafer and the people of North Dakota in order to ask for adequate funding for the Garrison Diversion Project for fiscal year 1997.

Although we do not know what the administration's budget request will be for the coming year, we have structured our budget request for $26.2 million based upon input from throughout the State, including the Indian tribes.

The State of North Dakota continues to view the Garrison Diversion Project as the premier water management project for the State. The Garrison Project holds the key to the future of North Dakota.

The project assures all of our citizens an adequate quantity and quality water for municipal, rural and industrial systems and it is our essential tool for economic development, agriculture, recreation, tourism and wildlife enhancement. We continue to work toward completion of the total Garrison Project.

Meanwhile, we must continue to work on several municipal, rural and industrial systems started with previous appropriations. We must complete the Southwest Pipeline Project to provide Missouri River water to 25 communities and a large rural area in southwest North Dakota. We must also begin the much-needed Regional Northwest Area Water Supply Project that also provides Missouri River water to the City of Minot and 15 surrounding communities and rural systems. For this part of the Garrison Project and appropriation, we need $16 million in 1997.

Several other projects for which we need funding include rural water projects such as the Benson, the Ransom-Sargent, Pierce, the Stutsman and the Williams Project, to name a few. Also, providing a greatly needed water supply for the Red River Valley is a priority for our State.

For Indian irrigation, to fulfill an obligation to the Standing Rock Sioux Tribe, we need $2.5 million. For recreation and fish and wildlife, we need $4.2 million, and for research and studies and facilities operations and management we need $3.5 million.

The amount we have asked for will only allow minor progress on the project but those who will receive good water as a result will enjoy a safer and healthier quality of life. This is what is important to the people of our State.

I have appeared before your committee before telling you of the situation and of the fact that North Dakota gave up 550,000 acres of valuable Missouri River bottomland for the creation of Lake Sakakawea and Lake Oahe. These large reservoirs provide flood control benefits, water supply and hydropower for our downstream neighbors.

We in turn hope that we can realize the benefits planned for our State as a result of the Pick-Sloan Project authorized in 1944. Completion of the Garrison Diversion Project is what is necessary, and $26.2 million is what is requested for 1997.

Mr. Chairman, North Dakotans are committed to the Garrison Diversion Project. Although we know the project can never be what it once was, it will continue to be the most important water management project in our State.

I thank you and the committee for its past support for the Garrison Project and it is our hope that you will continue to provide that support in 1997.

[The statement of Mr. Sprynczynatyk follows:]

TESTIMONY OF
David A. Sprynczynatyk
North Dakota State Engineer
and Secretary to the North Dakota State Water Commission

Before the House Subcommittee
on Energy and Water Development
Garrison Diversion Unit

February 28, 1996

My name is David Sprynczynatyk, State Engineer, and Secretary to the North Dakota State Water Commission. Thank you for the opportunity to appear today representing North Dakota Governor Edward T. Schafer and the State of North Dakota to urge adequate funding for the Garrison Diversion Project for Fiscal Year 1997.

Although we do not know what the Administration's budget request will be for the coming year, we have structured our budget request for $26.2 million based upon input from throughout the state, including the Indian tribes. This represents a minimum requirement for funding and is $3.5 million less than what we requested last year.

The State of North Dakota continues to view the Garrison Diversion Project as the premier water management project for the state. The Garrison Project holds the key to the future of North Dakota. The project assures all of our citizens an adequate quantity and quality water for municipal, rural and industrial systems; and it is our essential tool for economic development, agriculture, recreation, tourism, and wildlife enhancement.

We continue to work toward completion of the total Garrison Project; meanwhile, we must continue to work on several municipal, rural and industrial systems started with previous appropriations. We must complete the Southwest Pipeline Project to provide Missouri River water to 25 other communities and a large rural area in southwest North Dakota. We must also begin the much-needed regional Northwest Area Water Supply project to provide Missouri River water to the city of Minot and 15 surrounding communities and rural systems. For this part of the Garrison Project, we need $16 million in 1997.

Several other projects for which we need funding include rural water projects, such as Benson, Ransom-Sargent, Pierce, Stutsman, and Williams, to name a few. Also, providing a greatly needed water supply for the Red River Valley is a priority for our state.

For Indian irrigation to fulfill an obligation to the Standing Rock Sioux Tribe, we need $2.5 million. For recreation and fish and wildlife, we need $4.2 million, and for research and studies and facilities operations and management, we need $3.5 million. The amount we have asked for will allow only minor progress on the project, but those who will receive good water as a result will enjoy a safer and healthier quality of life. This is what is important for the people of our state. Our needs are immediate and we ask your consideration for meeting those needs.

I have appeared before you at previous subcommittee hearings, telling you of our situation and of the fact North Dakota gave up 550,000 acres of valuable Missouri River bottomland for the creation of Lake Sakakawea and Lake Oahe. These large reservoirs provide flood control benefits, water supply, and hydro-power for our downstream neighbors. We, in turn, hope that we can realize the benefits planned for our state as a result of the Pick-Sloan project authorized in 1944. Completion of the Garrison Diversion Project is what is necessary, and the $26.2 million requested for 1997 will help us toward that end.

Mr. Chairman, North Dakotans are committed to the Garrison Diversion Project. Although we know the project can never be what it once was, it will continue to be the most important water management project in our state. I thank you and your committee for past support for the Garrison Project, and it is my hope you will continue your support for Fiscal Year 1997.

Mr. SPRYNCZYNATYK. Mr. Chairman, also with me today is Robert Strand.

Mr. Strand is the Chairman of the Garrison Conservancy District.

Mr. FRELINGHUYSEN. Good afternoon and welcome.

If you will proceed.

Mr. STRAND. Mr. Chairman and Members of the subcommittee, I am Robert Strand, Garrison Diversion Conservancy District Board of Directors. I am here today to testify on the fiscal year 1997 appropriations for the Garrison Diversion Project.

Chairman Frelinghuysen, before I begin, I would like to take a moment to say thank you to Chairman Myers and Congressman Bevill for the years of support that they have given the Garrison Project. I understand that they both have decided to retire from Congress at the end of this year.

North Dakota and the Garrison Diversion Conservancy District have appreciated the years of support and leadership the two of those have provided to the Nation's water resource development program. I hope that those who follow will continue to see the wisdom of investing in and providing the necessary Federal dollars for this country's infrastructure. Now let me briefly testify to you as to what the Garrison Diversion Project's needs are for the next fiscal year.

Garrison Diversion's annual appropriation over the last 5 years has averaged over $30 million. Last year, we supported a reduced appropriation to $24.9 million because we recognized the need for all parts of the system to cut back and get along with less Federal Government funding. This year, we are still committed to maintaining the reduced levels. Our fiscal year 1997 funding request is $26.2 million.

A majority of that budget request for fiscal year 1997, $16 million is for the MR&I program that Mr. Sprynczynatyk just explained. In addition, the Federal Government has constructed two large pumping plants and over 120 miles of canal across the State. A plan to put those facilities to use and begin the delivery of at least a portion of the envisioned water supplies for other areas is in the works. Until then, it is imperative that those facilities be maintained for future use so that public access and public safety are protected.

Approximately $3 million is needed to continue that part of the operation. Chairman Taken Alive of the Standing Rock Sioux Tribe is here today to discuss the portion of the budget request that is destined for use in fulfilling a portion of the obligations for completing the authorized Indian irrigation systems. This is an important aspect of the Garrison program as well. They, too, are taking responsibility and making things happen on the reservation.

Thank you for your past consideration and for your time today.

[The statement of Mr. Strand follows:]

TESTIMONY OF

Robert Strand, Chairman
Garrison Diversion Conservancy District

Before the House Subcommittee
on Energy and Water Development
Garrison Diversion Unit

February 28, 1996

Mr. Chairman and Members of the Subcommittee:

I am Robert Strand, Chairman, Garrison Diversion Conservancy District Board of Directors. I am here today to testify on Fiscal Year 1997 appropriations for the Garrison Diversion Project.

Before I begin, I would like to take a moment to say thank you, Chairman Myers and Congressman Bevill, for your years of support for the Garrison Project. I understand that you both have decided to retire from Congress at the end of this year.

North Dakota and the Garrison Diversion Conservancy District have appreciated the years of support and leadership the two of you have provided for this nation's water resource development program. I hope that those who follow you will continue to see the wisdom of investing in and providing the necessary federal dollars for this country's infrastructure.

I don't know what your future plans are after leaving Congress, but if you ever want to visit North Dakota and experience the beauty of the prairie and its people, we would be most happy to be your host.

Now, let me briefly inform you as to what the Garrison Diversion Project's needs are for this next fiscal year.

Garrison Diversion's annual appropriation over the last five years has averaged over $30 million. Last year we supported a reduced appropriation of $24.9 million because we recognized the need for all parts of the system to cut back and get along with less federal government funding. This year we are still committed to maintaining the reduced levels. Our Fiscal Year 1997 funding request is for $26.2 million.

For years and years we were told that funding requests large enough to accomplish full capability of smaller projects, such as Garrison Diversion, would have to await the funding requests of higher priority programs, such as those in California and Arizona. Those projects are now fully funded and delivering benefits to the citizens of their states and many others across the west.

Over recent years, Garrison funding has also been bringing benefits to the citizens of North Dakota. In particular, are funds for the construction of Municipal, Rural and Industrial (MR&I) water projects across the state. Approximately $110 million has been appropriated for that purpose, and it has been used as judiciously as we know how. The federal government requires a 25% match of nonfederal dollars. In order to make the funds go as far as possible, the state and the Conservancy District have stiffened that requirement to a 35% match.

Nevertheless, the MR&I projects willing to work on that basis continue to grow. We are working on a proposal to provide off budget financing for as many of the project's needs beyond those that can be handled within existing authority. In the meantime, we need to keep the current program going. Nothing would be more discouraging than to see the current program slashed further in return for our willingness to first, stretch federal dollars by asking more of the local people and second, look to other funding sources beyond the current authority. Only a little over $80 million remains in funding authority for this program. A variety of water systems are underway which would eliminate the burden on rural citizens of hauling water for domestic needs and would provide a minimum water supply for dwindling livestock herds. Now they are waiting for word from Washington to see if they will be able to finish what they have started. A majority of the budget request for FY97 ($16 million) is for this MR&I program.

In addition, the federal government has constructed two large pumping plants and over 120 miles of canal across the state. A plan to put those facilities to use and begin the delivery of at least a portion of the envisioned water supplies for other areas is in the works. Until then, it is imperative that those facilities be maintained for future use so that public access and public safety are protected. Approximately $3 million is needed to continue that part of the operation.

Chairman Taken Alive is here today to discuss the portion of the budget request that is destined for use in fulfilling a portion of the obligations for completing the authorized Indian irrigation systems. This is an important aspect of the Garrison program as well. They, too, are taking responsibility and making things happen on the reservation.

Finally, the funding request at long last includes funds for completion of the required mitigation programs associated with the refuges. We are sure that this will provide an excellent setting for our proposal to complete a scaled-down and re-visioned project. We believe this proposal will save the taxpayers money, be environmentally superior and meet the most critical of North Dakota's water needs. We believe that is a legacy you would like to leave, and so would we. Thank you for your past consideration and for your time today.

Mr. FRELINGHUYSEN. Thank you, Mr. Strand.

You were good enough to recognize before you arrived, Congressman Tom Bevill, and his length of service and his particular help to this Nation, and most particularly to your State.

Mr. STRAND. Yes.

We want to thank you, Mr. Bevill, for your past support and wish you lots of luck now on your retirement from Congress.

Mr. BEVILL. Thank you. I appreciate that. You have been great to work with and we are going to have some good folks taking over here that are going to do a good job, too.

Mr. STRAND. Thank you.

Mr. BEVILL. You will be all right.

Mr. SPRYNCZYNATYK. We appreciate that, sir. That is a good assurance.

Mr. FRELINGHUYSEN. The Chair is pleased to recognize Jessie Taken Alive, Chairman of the Standing Rock Sioux Tribe.

Mr. Chairman.

Mr. TAKEN ALIVE. Thank you, Mr. Chairman.

My name is Jessie Taken Alive and I am Chairman of the Standing Rock Sioux Tribe. I hope it is not going to complicate things that I live in South Dakota, because our reservation encompasses both North and South Dakota. But I am the Chairman of our great Standing Rock Sioux Tribe.

Let me begin by sharing with you that the Standing Rock Sioux Tribe is—does have 2.3 million acres of agricultural land adjacent to the Missouri River. Presently, we have identified through a Bureau of Indian Affairs study done in 1979, there are 300,000 acres of irritable land within the boundaries of our reservation.

Presently, we are able to irrigate about 2,000 acres of these identified lands thus far, and let me point out that the 300,000 acres is not something that is a limitation on irrigable lands within our reservations. Obviously, the amount that is indicated in this Garrison Diversion Initiative, the $2.5 million which is identified for use for the Standing Rock Sioux Tribe is going to be a benefit to this process that we are looking at within the boundaries of Standing Rock Sioux Tribe.

We are working cooperatively with them, as we always have in the past, with any State or county or any other initiative within the State of North Dakota. Let me exemplify that by sharing with you the fact that we did sign an accord. The Governor of North Dakota, Edward Schafer and myself did sign an accord between our respective governments the 31st of January of this year, and it is with that spirit that we are with the Garrison Diversion unit at this time speaking on behalf of this initiative.

We also have other three brother tribes, if you will, within the State of North Dakota that we do a considerable amount of work with, but within the spirit of this accord is how we are approaching this Garrison Diversion Initiative.

Finally, I hope that the committee, as other committees I will be testifying in front of today, recognize and continue to recognize the treaty and trust responsibility that the United States of America has to American Indian Governments. Until the treaties are declared not the law of the land, we are going to look forward to the fulfillment of that trust and treaty responsibility.

Lastly, it has always been a lack of resources with us in Indian country and never a lack of know-how. And again to reiterate this amount, should it be approved, of $2.5 million to the Standing Rock Sioux Tribe is going to greatly enhance our efforts.

With that, gentlemen, I thank you for this opportunity. I thank the individuals that represent the State initiatives for this opportunity to testify.

[The statement of Mr. Taken Alive follows:]

Jesse Taken Alive
Chairman

Wilbur Red Tomahawk
Vice Chairman

ine McLaughlin
Secretary

Carol White Eagle
Cannonball District

Tom Kuntz
Fort Yates District

Leonard Bearking
Wakpala District

Samuel "Chuck" Claymore
Kenel District

Joe White Mountain Sr.
Bear Soldier District

Kenneth Red Bear
Rock Creek District

Jim Jamerson
Little Eagle District

Luella Harris
Porcupine District

AT LARGE
Joe Keepseagle
Charles W. Murphy
Terry Yellow Fat
Reva Gates
Sharon Two Bear
Dave Archambault

TESTIMONY

JESSE TAKEN ALIVE, CHAIRMAN
Standing Rock Sioux Tribe

before

House Energy and Water Development Subcommittee
on Appropriations
Honorable John T. Myers

FY 1997 Funding Request

Garrison Diversion Unit Reformulation Act
PL 99-294

Standing Rock Irrigation Development

February 28, 1996

P.O. Box D • Fort Yates, North Dakota 58538 • ☎ 701-854-7201 or 701-854-7202 • Fax 701-854-7299

TESTIMONY
STANDING ROCK IRRIGATION PROJECT

Public Law 99-294, Garrison Diversion Unit Reformulation Act of 1986, provided for the irrigation of 2,380 acres within the Standing Rock Indian Reservation. The Act also authorized $67.9 million for Indian irrigation, including both the Fort Berthold and the Standing Rock Indian reservations. Public Law 102-575 amended the Garrison Diversion Reformulation Act of 1986 and provided for appropriations of $12.54 million for the 2,380 acres authorized on the Standing Rock Indian Reservation.

In FY 1997, the Standing Rock Sioux Tribe seeks $2.5 million for irrigation construction. This is an amount agreed upon by all parties in the funding request for FY 1997 for the Garrison Diversion Unit fiscal year 1997 appropriations. It is contemplated that $2.5 million will be directed to the Standing Rock Sioux Tribe from the $26.2 million requested for all Garrison Diversion Unit appropriations. The Standing Rock Sioux Tribe will utilize the FY 1997 funds in the following manner:

Conclude final designs on 2,380 acres of irrigation development,	$ 750,000
Conclude construction of irrigation facilities on up to 400 acres of the Cannonball Unit,	$1,450,000
Initiate construction contracts on the Kenel Irrigation Project,	$ 200,000
Total	$2,500,000

The Tribe has capability to use the $2.5 million in FY 1997 appropriations in the manner described above. The Standing Rock Sioux Tribe has recently entered into a cooperative agreement with the Bureau of Reclamation which will conclude irrigation certification on 2,380 acres. The field work on this matter is scheduled for late April 1996 and can reasonably be concluded by June 1996. Work is also under way to conclude cost estimates on the construction, operation, maintenance and replacement of the irrigation systems that are necessary for the irrigation of 2,380 acres. The development of the irrigable lands has been decided upon by the Tribal Council of the Standing Rock Sioux Tribe as follows:

Cannonball Unit up to 400 acres

Grand River up to 250 acres

Kenel Unit and other South Dakota units, 1,730 acres

The capability to undertake the start of construction in FY 1997 is founded upon careful planning by the Standing Rock Sioux Tribe. Our Standards and Criteria Document was concluded in December 1988 and established the requirements of the project and the standards for construction. The Standards and Criteria Document was approved by the Bureau of Reclamation in March 1989. The Bureau of Reclamation approval was conditioned on the incorporation of their comments in the planning and development of the project, which the Standing Rock Sioux Tribe will insure to the satisfaction of all parties.

The Standards and Criteria Document identified areas throughout the Standing Rock Indian Reservation that were capable of irrigation based on reconnaissance level studies. The two criteria used to identify lands that could be selected for development of 2,380 acres were (1) irrigability and (2) trust ownership status. In this manner, from 15 to 20 thousand acres of potential development were identified.

In July 1989, the Tribe selected the Grand River area in the southern half of the Standing Rock Indian Reservation and in South Dakota for more detailed study. It was the intent of the Tribe to develop the 2,380 acres along the Grand River.

The Tribe's interest in the Grand River has considerable historic background. In 1944, Congress approved the Pick-Sloan Plan for the comprehensive development of the Missouri River Basin. Included in the plan were over 16,000 acres of irrigation along the Grand River within the Standing Rock Indian Reservation. It was contemplated that a dam would be constructed on the Grand River within the Reservation to create Blue Horse Reservoir for the regulation of the water supply. Irrigation pumping power would be provided from the main stem Missouri River hydroelectric units.

Non-Indian projects would be served upstream and to the west of the Standing Rock Indian Reservation from the Shadehill Project. This project also contemplated the building of a dam on the Grand River and the creation of Shadehill Reservoir. The latter project was implemented in the late 1940's, but the irrigation of the Grand River within the Standing Rock Indian Reservation was never undertaken. Therefore, the Standing Sioux Tribe had considerable interest in pursuing the development of part of the lands proposed for irrigation by the Pick-Sloan Plan on the Grand River.

Our planning report on the Grand River was concluded in April 1990. Thereafter, the Bureau of Reclamation expressed concern that Public Law 99-294 was too specific and limited the development of the 2,380 acres to the Fort Yates area. To resolve the concern of the Bureau of Reclamation, the Standing Rock Sioux Tribe pursued clarification of the legislative intent. Public Law 102-575, the Reclamation Projects Authorization and Adjustment Act of 1992 provided the clarifying language. The following summarizes:

> *Section 1601 clarifies the Garrison Reformulation Act of 1986 by deleting reference to "Fort Yates" and substituting "one or more locations within the Standing Rock Indian Reservation".* (Senate Report 102-267, page 151).

With a clear authorization to develop the 2,380 acres along the Grand River, the Standing Rock Sioux Tribe re-initiated its planning efforts shortly after passage of Public Law 102-575, which was signed by the President in late 1992.

The Bureau of Reclamation and the governing body of the Standing Rock Sioux Tribe became increasingly aware and concerned about the uncertainty of using Grand River water with a high sodium content on the soils along the Grand River. Experience within the Shadehill Project seemed to indicate that the Grand River water, in combination with clays in the soils of the Grand River were diminishing the capability of irrigated lands to take water. This matter had been investigated by the Missouri River Basin Investigations (MRBI) scientists in the mid 1960's, and corrections to the irrigability criteria along the Grand River had been made at the time. These adjustments had been taken into account by the Standing Rock Sioux Tribe in its planning. However, there was evidence that the initial criteria established in the 1940's and 1950's and the revisions to that criteria in the mid-1960's was under-conservative and that a stricter criteria may be required.

Rather than undertake more intensive investigations to determine a suitable irrigation criteria along the Grand River, which would ultimately be subject to a certain amount of risk, the Tribal Council of the Standing Rock Sioux Tribe elected to resolve the matter at a later date and to proceed to areas where irrigation development would not be effected by the combination of soils and water quality. This decision was made in April 1994, and the Tribe has proceeded with the soils investigations and land ownership identification necessary to arrive at the conclusions set forth above that define the areas that will now constitute the 2,380 acres.

Irrigation development has been a historic factor in the economy of the Standing Rock Indian Reservation. The Tribe developed the Fort Yates Unit in North Dakota which presently irrigates approximately 1,012 acres. This was followed by the Eagle Unit Development of 1,091 acres. These two projects have been operated since their development in the 1980's. They provide a modest level of income and employment for the Tribal membership. The farming operation is directed by a Tribal member who reports to the Standing Rock Farms Board. The Tribal Council reviews the operations of the farm and its board. The start of the development of the 2,380 acres authorized by PL 99-294 (as amended) with FY 1997 funds in the amount of $2.5 million is highly important to the continued development of irrigation within the Reservation. The project will enhance the economy of the Reservation and provide additional employment opportunities.

Mr. FRELINGHUYSEN. Thank you, Mr. Taken Alive, for your testimony.

Mr. Bevill, any comments?

Mr. BEVILL. No. I am just delighted to get to hear your fine presentation and I will be working with you until January the 3rd.

Mr. FRELINGHUYSEN. Gentlemen, thank you very much for being with us.

Mr. SPRYNCZYNATYK. Thank you again for the opportunity to be here.

[The statement of the Honorable Earl Pomeroy follows:]

TESTIMONY OF
Congressman Earl Pomeroy
Before the House Subcommittee on Energy and Water Development
February 28, 1996

Mr. Chairman and Members of the subcommittee, I want to thank you for the opportunity to submit testimony on behalf of the Garrison Diversion Project for the Fiscal Year 1997 Energy and Water Appropriations bill. This project is one of the most important water development projects in my state and it deserves the highest consideration in your decision-making process.

The Federal government still has a long way to go to meet its promises to North Dakota as a result of the creation of Lake Sakakawea and Lake Oahe. We gave up 550,000 acres of valuable Missouri River bottomland for the benefit of our downstream neighbors. Now all we ask is that the Federal government live up to its commitments to North Dakota to help develop the water resources that we need for continued agricultural, municipal and recreational opportunities.

The Garrison Diversion Project is key to the development of adequate water supplies for municipal and rural water systems, economic development, agriculture and recreation in North Dakota. We are requesting a total of $26.2 million for the 1997 fiscal year to continue work on several important components of the Garrison Project.

We are requesting $16 million to begin the Northwest Area Water Supply project to supply Missouri River water to Minot. We need $2.5 million to fulfill irrigation obligations to the Standing Rock Sioux Tribe, $4.2 million for recreation, fish and wildlife, and $3.5 million for facilities operations and management. The total request is $3.5 million less than last year's total because we all recognize the need to trim budgets and tighten belts.

In addition to the lower appropriation request the Conservancy District has stiffened the local matching fund requirement for the construction of Municipal, Rural and Industrial water projects to 35 percent, ten percent higher than the federally mandated 25% level. The Garrison District also is undertaking an effort to re-design the project in light of budgetary realities.

Clearly North Dakotans are doing their part to maximize current budget resources. Now the federal government should do its part in granting the FY97 appropriation request for the Garrison Diversion Project.

WEDNESDAY, FEBRUARY 28, 1996.

OHIO RIVER FLOOD PROTECTION, OHIO RIVER GREENWAY, WHITEWATER RIVER PROJECT

WITNESS

HON. LEE HAMILTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF INDIANA

Mr. FRELINGHUYSEN. The Chair is pleased with Mr. Bevill to Represent one of our colleagues, Congressman Lee Hamilton from Indiana.

Congressman, good afternoon.

Mr. HAMILTON. Mr. Chairman, good afternoon. Thank you very much for permitting me to testify.

I will offer my statement and ask that it be included in the record.

Mr. FRELINGHUYSEN. So ordered.

Mr. HAMILTON. I want especially, of course, to commend Chairman Myers for his extraordinary service to this committee and to the Congress and to the people of Indiana. I want him to know and perhaps you can convey to him my appreciation for his leadership in this area.

He is a person of great integrity and dedication and professionalism, and I have appreciated the opportunity to work with him over a period of years and I know this Congress is going to miss him when he is gone.

Mr. Chairman, Mr. Bevill, I have three projects I am interested in here today: $1.8 million to complete construction of repairs to some flood protection projects along the Ohio River, $5 million to initiate construction work of the Greenway which is on the north bank of the Ohio River in the New Albany, Clarksville and Jeffersonville region, and $115,000 to complete some construction work on the Whitewater River near Brookville, Indiana.

The first of those projects, the flood protection projects, I have a special wrinkle to that that is important here. The FY 97 request is for $1.8 million. We got a million dollars last year in the 1996 bill for the repair work.

I hope the subcommittee would consider providing the funding without the customary local match. That has been a problem for the Corps in the past, but in this case, the repairs involve more than ordinary operation and maintenance work, and the local match, of course, would be very burdensome to the local communities.

I am requesting the redirect language for the FY 96 money because the Corps has some doubts about its responsibilities here, and I would like to require the Corps to spend the million dollars appropriated last year for the repair effort. I have talked to the new Assistant Secretary of the Army about this, Mr. Martin Lancaster, our former colleague, and I understand that issue is now under review. That is a very important matter.

So there is the request for the additional $1.8 million and a request for redirect language. There is, of course, the possibly that the Corps would conclude that it lacks the authority to spend the fiscal year 1996 money and so I request that the subcommittee include the redirect language in the bill to require them to spend the million dollars on the repair work.

The second project, the Greenway Project, is really quite an exciting project. It is changing the waterfront along the Ohio River. This subcommittee has been extremely supportive of that over a period of years. The master plan has now been completed. Design work is almost completed. And we are requesting this year an authorization for construction work on the Greenway. And our request here is for $5 million to initiate the construction work.

This project has tremendous support in the area. It has opened up the eyes of people to see what can be done in terms of creating park land and green spaces along this vast and magnificent Ohio River. And it is a project that is now well underway with, I might say, a lot of local support and resources.

Finally, Mr. Chairman, I request a modest amount, $115,000, for stream bank erosion project on the Whitewater River. That is a river that attracts a lot of tourists, many canoe activities and water activities on that river, and the erosion is threatening roads and other infrastructure projects in the region. So I put a high priority on that as well.

I am very grateful to you for the support you have given me in the past and I hope you can look favorably on these requests.

And I thank you.

Mr. FRELINGHUYSEN. Thank you, Congressman Hamilton.

Any comment, Mr. Bevill.

Mr. BEVILL. No. Thank you.

Thank you, Lee.

Mr. HAMILTON. Thank you very much.

[The statement of Mr. Hamilton follows:]

LEE H. HAMILTON
9TH DISTRICT, INDIANA

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THE HONORABLE LEE H. HAMILTON

Statement before the

House Appropriations Committee

Subcommittee on Energy and Water

February 28, 1996

Mr. Chairman and members of the committee. Thank you for providing me with an opportunity to testify today in support of projects of particular importance to the Ninth Congressional District of Indiana.

I wanted to take this opportunity to commend you, Mr. Chairman, for your long record of service to this committee, to the Congress, and to the people of Indiana. It has been a great pleasure working with you over the years. You are an individual of remarkable integrity, dedication and professionalism, and you will be missed.

Your subcommittee has been very helpful in assisting with Ninth District projects in the past, and I have three requests for the subcommittee this year.

First, I request $1.8 million in fiscal year 1997 to complete construction on the repairs to the six Ohio River flood protection projects along the Ohio River. I also request redirect language requiring the Corps to spend the $1 million appropriated last year on this project.

Second, I seek $5 million in fiscal year 1997 to initiate construction work on the greenway corridor along the Ohio River in New Albany, Clarksville, and Jeffersonville, Indiana.

Third, I request $115,000 in fiscal year 1997 to complete Section 14 construction work on the Whitewater River project in Brookville, Indiana.

Ohio River flood protection projects

I request $1.8 million to complete repair work on six major flood protection projects along the Ohio River in southern Indiana. I ask that this item be included in bill language in the FY 1997 bill.

The Energy and Water Appropriations Act for Fiscal Year 1996 included $1 million to initiate repair work on the six Ohio River flood protection projects built by the Corps of Engineers from 1943 to 1954 and operated and maintained by the cities of Lawrenceburg, Jeffersonville-Clarksville, New Albany, Cannelton, Tell City, and

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Evansville. The additional $1.8 million will be used to complete the repair work next fiscal year.

I hope that the subcommittee would consider providing the funding without the customary local match. First, the repairs involve more than ordinary operation and maintenance work, for which the local communities would be responsible; rather, the repairs involve replacing deteriorated features which have outlived their design life, such as sliplining culverts and replacing switchgears. Second, the local match requirement would impose a significant burden on the six communities which operate and maintain the flood control projects.

I also ask that the subcommittee include redirect language in this year's bill requiring the Corps to spend the $1 million appropriated last year for this repair effort. It had been my understanding that the Corps had authority under existing law to proceed with repair work on these projects, but the Corps has recently raised questions about its authority to do so. I have contacted Assistant Secretary of the Army Martin Lancaster about this matter, and understand the issue is still under review.

There is, of course, a possibility that the Corps would conclude it lacks authority to spend the FY 1996 money. Consequently, I request the subcommittee include redirect language in the FY 1997 bill requiring the Corps to spend the $1 million in FY 1996 money on the repair work.

Ohio River Greenway

I am also seeking $5 million to initiate construction work on the Ohio River Greenway.

The greenway is an important project for my congressional district. It will include appropriate components at the Jeffersonville-Clarksville-NewAlbany waterfront, and provide residents and visitors with better access to this scenic riverfront corridor and its various attractions, including the Falls of the Ohio National Wildlife Conservation Area, the Louisville skyline, the federal McAlpine Locks and Dam, and the historic districts along the riverfront.

The Energy and Water Appropriations Act for Fiscal Year 1993 redirected $500,000 for the Corps to prepare a master plan for the greenway. The master plan has been completed.

The Energy and Water Appropriations Act for Fiscal Year 1995 included an additional $500,000 to prepare an environmental assessment on the greenway and initiate detailed design work on the greenway.

The Energy and Water Appropriations Act for Fiscal Year 1996 included an additional $500,000 for continued design work on the greenway project. I understand that planning and design for initial project features will be completed this fiscal year.

The appropriate study authorities exist for continued design work on the greenway project, but Congress must authorize construction work on the project. To that end, I will request that the House Transportation Committee include a $34 million authorization for construction work on the greenway in this year's water resources reauthorization bill.

Whitewater River project (Brookville, Indiana)

I am also seeking $115,000 to complete construction work on the Section 14 streambank erosion project on the Whitewater River at Brookville, Indiana in my congressional district.

Erosion along the Whitewater River is threatening roads and other infrastructure in the Brookville area. The Corps has completed planning and design work on the project, and is prepared to move forward to construction once funding is made available.

This is a high priority project for Brookville and Franklin County.

If the subcommittee chooses not to earmark funds for specific projects under the continuing authorities program, I ask that you consider increasing overall funding levels for the Section 14 and Section 205 programs. These are enormously important programs in my district and throughout the country.

Conclusion

These three projects are of critical importance to my district, to Indiana and to the region. I want to be helpful to Indiana residents and officials in moving these projects forward. I urge your approval of them.

I would be happy to answer any questions you may have.

Mr. BEVILL. Always look forward to hearing from you.

Mr. FRELINGHUYSEN. The Chair would also like to note for the record that he did sight Congressman Earl Pomeroy, who came in a little bit late, and unless there be any objection, I suspect that the Congressman may have wished to submit something for the record and if his staff could contact him, we will make that a part of the permanent record. I would certainly like to recognize that he tried to get here.

Mr. BEVILL. No objection.

Mr. FRELINGHUYSEN. Thank you.

Wednesday, February 28, 1996.

ILLINOIS PROJECTS

WITNESS

HON. JOHN EDWARD PORTER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. FRELINGHUYSEN. The Chair is pleased to recognize our colleague, Congressman John Edward Porter, from Illinois.

John, thank you for being with us.

Mr. PORTER. Mr. Chairman, let me thank you and Congressman Tom Bevill for the opportunity to testify this afternoon.

I come before the subcommittee today to express my strong support for several Army Corps of Engineer projects in my district, these projects are important to maintain the quality of the economy and the environment in my district.

The number one priority, Mr. Chairman, is funding for the North Libertyville Estates. This is a subdivision on the Des Plaines River which suffered back-to-back 100-year floods in 1986 and 1987, and last year the subcommittee provided for the project under Section 205, continuing authority program.

My understanding is that the project will not receive construction money for fiscal year 1996 because there are budgetary shortfalls in that program. This is a project that has very strong local support and the lack of Federal funding is hindering the work of the local sponsors. So I urge the committee to include $1.5 million in fiscal year 1997 so we can move this project forward, Mr. Chairman.

Second, I would urge that the feasibility study on the Des Plaines River be completed by September of this year. The—excuse me—the feasibility study on the Des Plaines River will be completed by the end of this year. I am hopeful that the President's budget includes $350,000 for preconstruction engineering and design as recommended by the study.

It is essential that this project continues. The local communities experience a great deal of tension every time it rains because of these 100-year floods. The project is a high priority for me and for the affected constituents along the Des Plaines River.

Third, I expect the President's budget to include $200,000 for Corps' operation and maintenance work at Waukegan Harbor in Waukegan, Illinois. The money will be used for completing an environmental impact study on a land fill for storage of PCB-contaminated dredge that is drawn from the Federal and State portions of the harbor's channel, and I urge the subcommittee to include that funding this year.

Fourth, I ask the subcommittee to provide $100,000 to the Corps for it to revise the feasibility study on the Illinois Beach State Park located in Illinois between Waukegan and Zion. The subcommittee included report language in the fiscal year 1994 E&W bill directing the Corps to complete and transmit a feasibility report to Congress on how best to preserve the shoreline of Lake Michigan at that point.

The Corps is complying with report language and is in the process of revising its study based on recommendations by the State of Illinois, the local sponsor. The funding will enable the Corps to complete this revised study in a reasonable period of time.

Finally, Mr. Chairman, I request the subcommittee to provide the Corps with funding for the Des Plaines Wetlands Demonstration Project. This was a project authorized in the 1988 Water Resources Development Act and authorized at $2.2 million.

Although the project receives financial support from local, State and private sources, it is critical to its success that Congress appropriate at least a portion of the money that it authorized. This is cutting edge technology for wetlands reclamation, something that ought to receive the support of the Federal Government as well as the State and local funding, and I would urge the committee to include at least a portion of the money that has been authorized in this year's appropriation.

I thank the subcommittee for the support that you have lent to these projects in the past and hope that you will continue your strong support.

Mr. FRELINGHUYSEN. Thank you, Congressman Porter, for your testimony.

Mr. PORTER. Thank you.

[The statement of Mr. Porter follows:]

Testimony of Honorable John Edward Porter

I. Projects to be discussed

   A. North Libertyville Estates

   B. Waukegan Harbor (O&M)

   C. Des Plaines River Project

   D. Illinois Beach State Park

   E. Des Plaines Wetlands Project

Chairman Myers and Congressman Bevill, thank you for the opportunity to testify before the Energy and Water Development Appropriations Subcommittee. I come before you to express my strong support for several Army Corps of Engineer projects that are vital to maintaining the quality of the economy and environment of my district. I am hopeful that many of these projects will be included in the President's budget request.

Mr. Chairman, my number one priority is to ensure funding for the construction of an earthen levee for the subdivision of North Libertyville Estates. This subdivision of approximately 150 homes is located in the floodplain of the Des Plaines River and suffered from back-to-back 100 year floods in 1986 and 1987. Last year the subcommittee provided for this project under the Section 205 continuing authority program. It is my understanding that as of this time the Army Corps is indicating that North Libertyville Estates will not receive construction money for fiscal year 1996 due to budgetary shortfalls. This project is strongly supported at the local level and the work of the local sponsor is being hindered because of the lack of federal support. I urge the subcommittee to again fully fund this project at $1.5 million for fiscal year 1997.

Second, I am pleased that the feasibility study for the Des Plaines River project will be completed in September and I am hopeful that the President's budget will include $350,000 for pre-construction, engineering and design. The feasibility study was undertaken in response to back-to-back 100 year floods which caused over $110 million in damage to communities near the river. It is vital that this project continues to move forward since these communities remain at risk of further damage every time heavy rains or other natural phenomena swell the Des Plaines River.

Third, I expect the President's budget to include $200,000 for the Corps' operations and maintenance work at Waukegan Harbor in Waukegan, Illinois. Part of the money will be used for completing the environmental impact study on a landfill in Bristol, Wisconsin designated by the Corps to store PCB-contaminated dredge drawn from the federal and state portions of the harbor's channel. The remaining money will be used for project condition surveys.

Fourth, I ask the subcommittee to provide $100,000 to the Corps for it to revise the feasibility study on the Illinois Beach State Park located between Waukegan and Zion, Illinois. Report language was included in the fiscal year 1994 Energy and Water Development Appropriations bill directing the Corps to complete and transmit a feasibility report to Congress with conclusions and recommendations on how best to preserve the shoreline. The Corps is complying with the report language and is in the process of revising the study based on recommendations made by the State of Illinois which is the local sponsor. This funding will enable the Corps to complete this revised study in a reasonable period of time.

Finally, Mr. Chairman, I request that the subcommittee provide the Army Corps of Engineers with funding for the Des Plaines Wetlands Demonstration Project in Wadsworth, Illinois. Under the 1988 Water Resources Development Act Congress authorized $2.2 million for the Des Plaines

Wetlands Project. While the project receives substantial funding from local, state and private sources, it is critical that Congress appropriate at least a portion of the money it has authorized for the project. Without federal support, the project will take up to ten years before it will be completed.

I appreciate the support the subcommittee has lent to these projects in the past and I am prepared to answer any questions you may have.

WEDNESDAY, FEBRUARY 28, 1996.

NORTH SHORE OF LONG ISLAND

WITNESS

HON. GARY L. ACKERMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. FRELINGHUYSEN. The Chair is pleased to recognize the Honorable Gary L. Ackerman, Congressman from New York.

You brought a young visitor with you.

When you care to get up, you can recognize him.

Mr. ACKERMAN. This is Timothy Riley, and maybe he could sit next to me, Mr. Chairman, if that would please the committee.

Mr. FRELINGHUYSEN. Absolutely. We would be pleased.

You shall be served on this committee.

Mr. ACKERMAN. He is here with his dad, Steve Riley, his Republican dad, he reminds me.

Mr. FRELINGHUYSEN. That is all the more reason.

Mr. BEVILL. He uses his little brain.

Mr. ACKERMAN. He didn't want to come down during the last administration. He is 13 years old. He waited it out.

Mr. BEVILL. He is just the right age to be your successor.

Mr. ACKERMAN. I am breaking him in.

Mr. BEVILL. He has to be 25, you know.

Mr. ACKERMAN. We are trying to arrange a party switch at some appropriate level. The way these districts are going, you never know.

Mr. FRELINGHUYSEN. Good afternoon and welcome.

Mr. ACKERMAN. Good afternoon, Mr. Chairman. Thank you very, very much and I thank the Members of the subcommittee for allowing me the opportunity to appear before you today and to request that the subcommittee provide $250,000 to begin the feasibility portion of the coastal erosion study on the North Shore of Long Island.

Mr. BEVILL. Excuse me, Mr. Chairman.

That is the smallest request we have had today.

Mr. FRELINGHUYSEN. It certainly is. It is amazing, isn't it?

Mr. ACKERMAN. It is a very modest request, Mr. Chairman, that has followed a lot of money being poured into study upon study, and this would help us tremendously. And it is deliberately modest and, therefore, I hope you would give it your fullest consideration.

As many of you do know, the North Shore of Long Island has a considerable history of tidal flooding and shore erosion and damage to shore-front development. Hurricanes affecting the area occurred in 1938, 1944 and 1954 and 1960, well, major hurricanes.

In addition, tropical storms occurred in the area in 1950, 1953, 1955, 1962 and 1992. Recent coastal storms have caused shoreline erosion resulting in storm damage to several communities, including Bayville in Nassau County and the Village of Asharoken and in Suffolk County. The December of 1992 nor'easter inundated hundreds of residential and business properties with damages estimated at over $12 million. In addition, approximately 300 people were evacuated and a section of Bayville, the Village of Asharoken and Eatons Neck were impassable and under water for days.

So far this year we have been lucky. There have been several severe storms in the Northeast with some flooding but none has resulted in the extensive damage caused by the 1992 nor'easter. It is probably only a matter of time. In September of last year, the Army Corps of Engineers completed the reconnaissance study of the North Shore, which found that based on a general assessment of coastal flooding and beach erosion, the area is particularly susceptible to storm damage and that the Villages of Bayville and Asharoken typify the flooding and erosion problems in the study area.

Finally, the study recommended that further feasibility studies for beach erosion and control and storm damage reduction be conducted in order to formulate the most appropriate plan for any proposed storm damage protection project.

The Federal interest in the North Shore is well-documented. The Army conducted a study of hurricane damage to coastal and tidal areas in response to a series of hurricanes beginning in 1954. In 1963, the Army began a study of beach erosion and hurricane protection which was completed in 1969. Clearly, the area has been studied to death. It is time to move beyond identifying the problem and to begin designing the solution.

Last year's report, a copy of which I brought, cost over a million dollars. The appendices to this are three times this size, and identified two plans for Bayville and two for Asharoken, both of which have positive benefit to cost ratios.

The plan for Bayville use a combination of features, including a buried seawall, a composite bulkhead/revetment and floodwalls. The plan for Asharoken uses a combination of buried seawall and beach nourishment to provide erosion control and flood protection. The report went on to note that, and I quote, "a feasibility study having a greater level of detail is required to formulate the most appropriate plan for any proposed storm damage protection project," said the report.

Notwithstanding the administration's policy on coastal erosion projects, I ask that the subcommittee reject this year, as it did last year, the proposal to phase out coastal erosion studies and direct the Army Corps of Engineers to proceed with the North Shore Feasibility Study. We have an awful lot of time, an awful lot of money already invested in this and this small amount would help us to complete this very important project.

I thank you, Mr. Chairman and members of the committee.

Mr. FRELINGHUYSEN. Thank you, Congressman Ackerman.

Mr. ACKERMAN. Thank you.

Mr. FRELINGHUYSEN. Thank you very much.

Young man, come back again.

Mr. RILEY. I will be back in 10 years.

Mr. FRELINGHUYSEN. So noted for the record.

Right, Mr. Bevill?

Thank you very much.

Mr. BEVILL. Gary, we will work with you and do the best we can.

Mr. ACKERMAN. Thank you very much.

I appreciate your cooperation as always.

Mr. BEVILL. Especially that $250,000 project.

[The statement of Mr. Ackerman follows:]

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COMMITTEE ON
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SECURITIES AND GOVERNMENT
SPONSORED ENTERPRISES

DEMOCRATIC STEERING COMMITTEE

STATEMENT OF REP. GARY L. ACKERMAN

BEFORE THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

FEBRUARY 28, 1996

SUMMARY

Request for the Subcommittee to provide $250,000 to begin the feasibility portion of the coastal erosion study on the North Shore of Long Island as authorized by a resolution of the Committee on Public Works and Transportation on May 13, 1993.

STATEMENT

Mr. Chairman, members of the subcommittee, I am grateful for the opportunity to appear before you to ask that the subcommittee provide $250,000 to begin the feasibility portion of the coastal erosion study on the North Shore of Long Island.

As you may know, the North Shore has a considerable history of tidal flooding, shore erosion, and damage to shorefront development. Hurricanes affecting the area occurred in 1938, 1944, 1954, and 1960. In addition, tropical storms occurred in the area in 1950, 1953, 1955, 1962, and in 1992. Recent coastal storms have caused shoreline erosion resulting in storm damage to several communities, including Bayville in Nassau County and the Village of Asharoken in Suffolk County. The December of 1992 Nor'easter inundated hundreds of residential and business properties with damages estimated at $12 million. In addition, approximately 300 people were evacuated, and sections of Bayville, the village of Asharoken and Eatons Neck were impassable for days.

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The Federal interest in the North Shore is well documented. The Army conducted a study of hurricane damage to coastal and tidal areas in response to series of hurricanes in 1954. In

1963, the Army began a study of beach erosion and hurricane protection which was completed in 1969. Clearly the area has been much studied. It is time to move beyond identifying the problem to designing the solution.

Last year's report identified two plans for Bayville and two for Asharoken both of which have positive benefit to cost ratios. The plans for Bayville use a combination of features including a buried seawall, a composite bulkhead/revetment and floodwalls. The plans for Asahroken use a combination of buried seawall and beach nourishment to provide erosion control and flood protection. The report went on to note that "a feasibility study having a greater level of detail is required to formulate the most appropriate plan for any proposed storm damage protection project."

Notwithstanding the Administration's policy on coastal erosion projects, I ask that the Subcommittee reject this year, as it did last year, the proposal to phase out coastal erosion studies and direct the Army Corp to proceed with the North Shore feasibility study.

Thank you.

WEDNESDAY, FEBRUARY 28, 1996.

UPPER MISSISSIPPI RIVER

WITNESS

HOLLY STOERKER, EXECUTIVE DIRECTOR, UPPER MISSISSIPPI RIVER BASIN ASSOCIATION

Mr. FRELINGHUYSEN. Ms. Holly Stoerker, Executive Director, Upper Mississippi River Basin Association. Good afternoon. How are you?

Ms. STOERKER. Well, I am just fine. Thank you very much.

Mr. FRELINGHUYSEN. We will include in the record any prepared statement you have.

Ms. STOERKER. And I do have one. It is always a pleasure to appear before this committee. I do regret, however, that I have to precede Congressman Gunderson, who is one of our most passionate and articulate spokespeople.

Mr. BEVILL. He will be glad to know you said that.

Ms. STOERKER. I am waiting for him to walk in behind me. I am here today to talk about three projects, all of which relate directly to the Upper Mississippi River. The first is the Environmental Management Program and as many members of this committee realize, we have been here for, I believe, this is the—our tenth year that we have appeared before you in support of this program, which we believe has proved to be an enormously important tool for protecting and enhancing the ecological health of the river.

There is basically two parts to the program. There is a construction component that deals with the restoration of backwater areas. There is also a monitoring component where we are kind of taking the pulse of the health of the river, looking at chemical, physical and biological characteristics.

The States are urging that this committee, as you have done very consistently since 1992, provide full funding for the program this year. We are really at a point where we can't erode a commitment we have made to this program. We have got 14 projects under construction, various stages of construction, and we have another 15 that are designed and poised and ready to go.

It is also worth mentioning, I think, with regard to this program, that as the authorizing legislation requires, we are going to be collaborating with the Corps of Engineers, starting within the next few months, to undertake a 2-year evaluation of the program that will result in recommendations to Congress about the future of the program. Again, this is something required by the law and something we are very dedicated to doing.

The second project that I would like to urge your consideration of is a feasibility study within the general investigations budget, the navigation study on the Upper Mississippi River. As you know, in addition to the ecological kinds of benefits I have just talked about in terms of the environmental management program, the Mississippi River is critical to our ability to export our agricultural commodities to world markets and yet the system is fast approaching the end of its design life, and over the next few years we are going to have to make some very important decisions about how we are going to keep that system viable into the next century.

So this study is looking at economic, engineering and environmental questions associated with those decisions that we are going to have to make.

The States in the region have become very concerned that this be an adequate study and in this regard about nine months ago the Corps made a decision to expand the scope of the study to ensure that it was adequate, including to ensure that it would comply with NEPA. And that decision, which the State supported, and the Governors in the region, increased the total study cost by $6 million. Now, unfortunately, that means that even the fiscal year we are now in, fiscal year 1996, there is a funding shortfall of $4.4 million for this study.

Now, what complicates the fact and the real dilemma is that this committee has directed that study to be completed by 1999, and the shortfall that we are experiencing in this year alone means probably another year will be added to that study.

And finally, I would call your attention to the Mainstem Hydraulic Model. Following the 1993 flood, it became painfully obvious to us in the Midwest that we didn't have the tools we needed to evaluate the dynamic conditions of a widespread flood event like this. The States had really long argued that what we needed was something called an unsteady flow model and, in fact, the Galloway Report, which the Clinton administration commissioned following the 1993 floods recommended the very same thing. And, indeed, the Corps started that immediately after the 1993 floods and it is our understanding that another $500,000 is needed to complete the development of that model.

I thank the committee for this opportunity. I would be happy to answer questions, and I hope that Congressman Gunderson is in the room behind me.

[The statement of Ms. Stoerker follows:]

Statement of the Upper Mississippi River Basin Association on FY 1997 Energy and Water Development Appropriations

(February 28, 1996)

Upper Mississippi River System Environmental Management Program [CG Budget — $19.455 million]

- Provides for construction of projects to restore and enhance degraded habitats and supports long term monitoring
- Less than full funding would disrupt on-going construction (14 projects) and curtail construction of projects already designed (15 projects)
- Annual appropriations and program time frame are capped
- Non-construction component (monitoring) has limited budgetary flexibility
- Evaluation of program is underway and will yield recommendations to Congress

Upper Mississippi and Illinois Navigation Study [GI Budget — $13.0 million (or capability)]

- Evaluates need for expansion of navigation capacity
- Study scope recently expanded to insure NEPA compliance and study adequacy
- Funding shortfall of $4.4 million in FY 1996
- Congressionally-imposed study deadline in jeopardy

Mississippi River Basin Mainstem Model Development [O&M Budget — $.5 million]

- Unsteady flow model will provide real-time discharge and stage data
- Existing models proved unsatisfactory during and following 1993 Midwest floods
- Human and financial costs of flooding can be reduced with improved modeling capability
- $500,000 required to complete

A) Background

The Upper Mississippi River Basin Association is the organization created 15 years ago by the Governors of the states of Illinois, Iowa, Minnesota, Missouri, and Wisconsin to serve as a forum for coordinating river-related state programs and policies and for collaborating with federal agencies on regional issues. As such, the Association works closely with the Corps of Engineers on a variety of programs for which they have responsibility. Of particular concern to the basin states are three Corps programs, all of which may be in jeopardy as a result of pressures to reduce spending: the Environmental Management Program, the Upper Mississippi navigation study, and the mainstem hydraulic model.

B) Environmental Management Program

The Upper Mississippi River System Environmental Management Program (EMP) was authorized in the 1986 Water Resources Development Act in response to the need for both restoring lost and degraded habitat and improving scientific understanding of the river system. What was at first a novel new approach to interagency environmental management, has now become a widely recognized and respected regional program.

The EMP consists of two primary components: the construction of individual projects to rehabilitate or enhance critical habitat areas and a long term monitoring program to track the environmental health of the system. Each of the habitat projects (varying in size and ranging in cost from about $200,000 to $7 million) employs different types of techniques, including such measures as selective dredging to remove sediment, island creation, water level control features, and side channel closures or openings. The long term monitoring program consists of six field stations throughout the river system which routinely collect standardized data on water, sediment, fish, and vegetation at over 150 sites. In addition, the monitoring program headquarters at the Environmental Management Technical Center is home to a multi-disciplinary team of scientists who are interpreting and displaying the data in ways that will be useful for management decisions.

The unique character of the EMP is, in part, a function of its partnership design. While the Corps of Engineers is the lead agency, the U.S. Fish and Wildlife Service, National Biological Service (soon to be merged with USGS), and five basin states all have specific roles to play in planning, designing, evaluating, and operating and maintaining the habitat projects, as well as conducting the data collection and analysis that is part of the long term monitoring program.

The Upper Mississippi basin states are keenly aware that the Corps of Engineers, like every federal agency, is facing increasingly difficult budgetary constraints. As the tough decisions are made about how limited federal resources will be spent, it is clear that investments will be focused on those projects and programs which are 1) within the top national priority missions, 2) appropriately a federal responsibility, and 3) yield measurable and significant benefits. We believe that the EMP qualifies on all three counts.

First, the Administration has identified three priority mission areas for the Corps, including "environmental restoration." The EMP is certainly one of the most prominent and well-regarded of these types of ventures.

Secondly, the national significance of the Upper Mississippi River and the long history of extensive federal responsibility for its management are clear. In 1986 Congress declared the Upper Mississippi River System to be "a nationally significant ecosystem and a nationally significant commercial navigation system." The environmental degradation which the EMP is designed to address is related, at least in part, to the way in which the system has been managed for the past 50 years by the federal government for commercial navigation purposes. In addition, the national significance of the river's habitats and its resident and migratory species is exemplified by the fact that there are five national wildlife refuges along the river, comprising nearly 300,000 acres. Indeed, a number of the habitat restoration projects undertaken as part of the EMP program are located on lands managed as national refuges.

Thirdly, the EMP has proven to be a wise investment, with pay-offs that have become increasingly clear. Because the EMP, through its long term resource monitoring program, has been able to compile an array of integrated data sets and build an unrivaled capacity for systemwide spatial data analysis on the Upper Mississippi River, it is benefiting a variety of other federal endeavors beyond what its creators might have originally imagined. One of the most prominent examples is the Corps of Engineers' Upper Mississippi-Illinois Waterway Navigation Feasibility Study which relies heavily upon the EMP's Environmental Management

Technical Center (EMTC) for the navigation impact analyses and environmental studies that are part of the navigation study. In addition, the EMTC's ecological data and geographic information system (GIS) are being utilized by EPA to help fulfill its responsibilities under the Oil Pollution Act of 1990.

Similarly, the habitat projects which have been constructed under the auspices of the EMP are yielding tangible ecological responses. Improvements in the quality of habitat as a result of reduced turbidity, increases in the flow of oxygenated water, and reduction in wave action and sediment resuspension, are benefiting fish, migratory waterfowl, aquatic vegetation, and other vital components of the riverine community.

Despite these demonstrable successes and a clear federal mandate, the possibility that the Administration may recommend radically reduced funding is of grave concern to the basin states. While it is not yet clear what the Administration will recommend for the FY 1997 budget, the EMP will certainly not be immune from the pressures to reduce spending. However, a variety of factors suggest that, even in the current climate of diminishing resources, it is important to provide the full authorized funding level ($19.455 million) for the EMP:

- The EMP partner agencies have initiated a comprehensive evaluation of the EMP which will be used to formulate a "report to Congress." In the 1986 authorizing legislation, Congress directed that such a report be submitted prior to the end of the authorization period (i.e., 2002). That report is to evaluate the program's strengths and weaknesses and include recommendations regarding whether the EMP should be terminated, continued, or modified. While the EMP authorization does not expire for another five years, it is generally agreed that such a report would be particularly useful now.

  More specifically, over the past ten years numerous advancements have been made in the art and science of environmental restoration and we have gained considerable experience through the EMP in understanding both the opportunities and limitations of existing techniques and programs. We should utilize that experience to shape improved strategies for environmental restoration including changes to the EMP itself. It would be particularly unfortunate and ironic if the EMP were to face funding cutbacks at a time when an effort is underway to assess its effectiveness and make recommendations regarding its future.

- Unlike most other Corps projects, the EMP is "capped" by its Congressional authorization both in terms of annual appropriations and overall time frame. Therefore annual funding decisions have a far greater impact on whether the program is ultimately able to accomplish its goals. No other Corps program or project of which we are aware is constrained by this unique synergistic combination of time and financial limitations.

  In the first four years of its authorization (1988-1991), the EMP suffered from funding shortfalls of more than $30 million below authorized levels. The annual cap on appropriations makes it impossible to "recapture" this shortfall.

- The ability to execute project construction is at an all-time high. There are currently fourteen habitat projects under construction and there are another fifteen projects ready to proceed to construction. If full program funding is not made available in FY 1997, much of this important work will either be terminated or deferred indefinitely.

- The success of the Long Term Resource Monitoring (LTRM) component of the EMP is dependent, in part, upon relatively reliable and constant funding levels. As a non-construction element of the EMP which supports teams of scientific and field personnel, the LTRM is particularly sensitive to annual funding variances. In this regard, the LTRM is unique within the Corps' construction general account, where there is typically more flexibility to respond to annual budgetary fluctuations.

C) Navigation Study

In 1993 the Corps of Engineers initiated a feasibility study of navigation capacity expansion on the Upper Mississippi River and Illinois Waterway, a transportation system that is vitally important to the Midwest and the nation in linking agricultural commodities to international markets. The states in the region have been providing advice and counsel to the Corps throughout the study via a special "liaison committee" comprised of gubernatorial appointees from each of the five basin states. The results of this study will be critical to our ability to make reasoned decisions about the future of the Upper Mississippi navigation system. Given that the merits of future multi-billion dollar investments will be judged based upon this study, the states of the basin are deeply concerned that the study include adequate and timely data and analysis. Funding shortfalls can be debilitating and the basin states thus urge that the study be funded to the Corps' maximum ability to execute in FY 1997. The following points are worthy of note:

- The scope and adequacy of the navigation study have been issues of some controversy. However, a number of adjustments have been made which will enhance the study's capacity to yield useful and necessary information. In particular, the basin states urged that the economic component of the study be expanded to include a regional economic analysis in addition to the traditional required evaluation of national economic development benefits. In response, the Corps revised its study plan by adding $320,000 for such a regional economic analysis. In addition, the states recommended additional studies to overcome deficiencies in the scope of the environmental portion of the navigation study. The Corps evaluated the requests and determined that it was necessary to complete several of the additional studies that the states identified, thereby increasing the cost of the environmental studies by $5.2 million. The Corps has deemed this work to be absolutely necessary to produce adequate data upon which to base future decisions and to comply with the requirements of the National Environmental Policy Act (NEPA). It is critical that adequate funding be provided to keep these components of the study on track.

- Adequate funding is particularly important in FY 1997 given the extraordinary funding shortfalls which the study suffered in FY 1996. While Congress appropriated the full amount which the Administration had requested for FY 1996 ($6.205 million), it was not until after the Administration submitted its budget request that the Corps determined that additional analysis would be required to insure the adequacy of the study. Those decisions, many of which were in direct response to concerns raised by the basin states, increased the total study cost estimates by approximately $6 million. Many of the added study components are on "critical paths" that required substantial work effort in FY 1996, increasing funding needs for that year alone by $2.8 million.

  To date, the Corps has been unable to secure the additional funds that are required in FY 1996, including $1.6 million that was withheld from the appropriated amount for savings and slippage. The basin states are deeply concerned about how this shortfall (totaling $4.4 million) has already and will continue to affect the study.

- Compounding the problems associated with the FY 1996 funding shortfall, is the fact that Congress, in the conference committee report for the FY 1996 Energy and Water Development Appropriations bill, directed the Corps to complete the Upper Mississippi navigation study by 1999. It will be impossible to meet this deadline without sacrificing components of the study which the Corps has judged to be essential for NEPA compliance, an action which neither the Corps nor the states are willing to take. It is our understanding that the FY 1996 shortfall alone means that the study schedule will slip by one full year.

- Out-year budgetary schedules which the Corps had developed prior to the devastating FY 1996 shortfall, indicated that $8.6 million would be required in FY 1997. That amount in combination with the $4.4 million FY 1996 shortfall suggests that $13 million is now required in FY 1997. Should $13 million exceed the Corps' ability to execute, the basin states would recommend that funds totaling the Corps' maximum FY 97 capability be provided.

D) Mississippi River Hydraulic Model

Following the Great Flood of 1993, the Corps of Engineers and the basin states became acutely aware of the need for a hydraulic model that would provide real-time discharge and stage data during flood events and enable evaluations of how changes in one area of the river will affect other areas. Thus, the Corps initiated development of an unsteady flow model for the Mississippi River and its major tributaries.

The Corps has built and operates a large number of reservoirs, levees, floodways, and flow diversion structures in the basin. There is an urgent need for an integrated model that will enable these various projects to be operated and managed in a coordinated fashion when wide-spread storm systems cover a large geographic region, as was the case in 1993. Such a model will have a variety of uses and applications including:

- coordination and sharing of data and forecasts during low flows as well as floods,
- assessment of the impacts of levee breaching and floodway operations on local and downstream areas,
- support for emergency management activities by timely prediction of stage and rate of risk,
- display of areal extent of flooding for various predicted weather scenarios and levee failures,
- identification of navigation hazards, and
- data for real-time damage assessment.

There is a widely recognized need to update the flood profile atlas prepared by the Corps and basin states in 1978. With updated flood statistics and the unsteady flow model, revised stage-frequency relations and revised flood elevation profiles can be prepared. This information is necessary for flood control studies, flood insurance, and floodplain management.

The basin states have long advocated the development of a system-wide unsteady flow model for the Mississippi River and its tributaries. The "Galloway Report," which the Clinton Administration commissioned following the 1993 Midwest floods, also recommended such a model, noting that current models are simply unable "to satisfactorily model the complex condition of flow in large rivers...."

The Corps of Engineers initiated work on its unsteady flow model in FY 1994. It is our understanding that $500,000 is needed to complete model development in FY 1997. The states strongly endorse appropriation of the funds necessary to complete the model.

Mr. FRELINGHUYSEN. Let me just say for the record I believe the Congressman is on the Floor. They are debating the farm bill. So I suspect he will probably be there because he has, I believe, certain actions he needs to take on the Floor. But we will do our level best, as a committee, to protect his interests and we appreciate your testimony.

Ms. STOERKER. Thank you very much.

Mr. FRELINGHUYSEN. Thank you very much.

Mr. BEVILL. We will let him know what a good job you did.

Ms. STOERKER. I appreciate that.

Mr. BEVILL. Maybe you did better than he would have done if he were here.

Ms. STOERKER. What a compliment. Thank you very much.

Mr. BEVILL. You know, the late Jamie Whitten, who was a member of this panel and served 52 years in the Congress, he used to say, you don't control the Mississippi River, you work with it.

Ms. STOERKER. Absolutely. We have grown to learn that.

Mr. BEVILL. So you work with it, don't you?

Ms. STOERKER. Absolutely. Thank you.

Mr. FRELINGHUYSEN. Thank you, Mr. Bevill.

WEDNESDAY, FEBRUARY 28, 1996.

MARYLAND PROJECTS

WITNESSES

HON. STENY HOYER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MARYLAND

HON. BENJAMIN L. CARDIN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MARYLAND

HON. WAYNE T. GILCHREST, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MARYLAND

HON. ROBERT L. EHRLICH, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MARYLAND

TAY YOSHITANI, EXECUTIVE DIRECTOR, MARYLAND PORT ADMINISTRATION, THE WORLD TRADE CENTER, BALTIMORE, MARYLAND

DAVID L. WINSTEAD, SECRETARY, MARYLAND DEPARTMENT OF TRANSPORTATION

HON. HELEN BENTLEY, FORMER CONGRESSWOMAN FROM THE STATE OF MARYLAND

Mr. FRELINGHUYSEN. The Chair is pleased to recognize Congressman Steny Hoyer. You are here representing, of course, Maryland and there is quite, I think, a delegation from the—and former Congresswoman Helen Bentley is here.

Mr. HOYER. I am here as usual taking instructions from Mrs. Bentley. It has been a long history that I have found useful.

Mr. FRELINGHUYSEN. We would love like to have you both instruct us and come forward, if you care to, and the representatives of the Maryland Department of Transportation, as well as the Port of Baltimore. There is a delegation?

Mr. HOYER. There was a delegation.

Mr. FRELINGHUYSEN. There was.

Mr. HOYER. I represent the board of St. Mary's City, I suppose, where the ark and the dove landed in March of 1634.

Mrs. BENTLEY. He did the ark and I did the dove.

Mr. BEVILL. As long as you take orders from Mrs. Bentley, you won't go wrong.

Mr. HOYER. That has been my experience.

Mrs. BENTLEY. Thank you, Mr. Bevill.

Mr. HOYER. I guess we are waiting, Congressman, for Secretary Winstead. Actually, I am here in support of his testimony on an issue of great importance. Mrs. Bentley, who served long and well on the Appropriations Committee and lamentedly for our State is still not a member of our delegation because she was one of our most effective members; of course, was intimately involved in the Port of Baltimore for many, many years as a reporter and as one of the experts in this country, and, as you know, the first female maritime commissioner in the history of our country, and who is now an advisor and counselor to us all on the health and growth and maintenance of the port and its activities.

Mr. FRELINGHUYSEN. Ms. Bentley was good enough to take me on the tour of the Hart-Miller Containment Island last year. People often asked what we do on these junkets, but it is not often where you visit an island that is made of garbage. Very interesting. Very interesting. I enjoyed myself.

Mrs. BENTLEY. It was a good trip.

Mr. FRELINGHUYSEN. Wonderful.

Now, are we about ready to proceed? And you are?

Mrs. BENTLEY. This is Mr. Tay Yoshitani, who is the Executive Director of the Port of Baltimore.

Mr. YOSHITANI. Good afternoon, Mr. Chairman.

Mr. FRELINGHUYSEN. We are pleased to have you here, and I believe you are going to give us some testimony, with some good support.

Mr. YOSHITANI. Actually, the Secretary of Transportation, Mr. Winstead, was supposed to be here to give the testimony, but I would be happy to start in the interest of time.

Mr. FRELINGHUYSEN. All right. Oftentimes down here things are always running late. It is very rare when you are running ahead of schedule, so if you would wish to give that testimony, we will include either part or all of it in the record.

Mr. YOSHITANI. That would be great, if that is okay.

The Maryland Department of Transportation is pleased to present the testimony regarding various proposals related to the channel system serving the Port of Baltimore. At the outset, the Department expresses its appreciation for the committee's continuing support of the Corps of Engineers' activities, which are vital to the interests of the ports throughout the country.

The Port of Baltimore is a major factor in the economy of the State of Maryland. Each year the port generates some $2 billion in Statewide economic impact and contributes each year about $400 million in United States customs receipts and approximately $25 million to the Harbor Maintenance Trust Fund.

Some 87,000 jobs are directly or indirectly related to the port activity, of which nearly 63,000 are located in the State of Maryland.

The economic vitality of our port is in large part dependent upon the ability to maintain and improve the 125 miles of channels that connect it to the ocean. The port is served by two-pronged channel systems, the channels which approach the port from the South, from the mouth of the Chesapeake Bay, are maintained at an authorized depth of 50 feet. Channels leading to and from the North via the Chesapeake and Delaware Canal, the C&D Canal, as we refer to it, are maintained at an authorized depth of 35 feet.

The southern approach is used by both deep draft bulk cargo carriers and container ships. Whereas the C&D Canal system, which is, in essence, a shortcut to and from points North, is especially important for container ships carrying high value cargo. The project, which deepened the Baltimore southern approach channel to 50 feet, was the first deep draft channel authorized in the Nation. It was authorized back in 1970.

The work was accomplished in accordance with cost-share provisions with WRDA 1986, with the State paying $70 million towards the dredging, and an additional $60 million to provide the dredge material containment site at Hart-Miller Island. This project was a significant milestone for the Port of Baltimore. However, the need for this channel work did not end with this one project. A decade later, there are a number of new projects, continuing requirements and completion of old business for the port that will require attention.

Foremost among these projects at which material dredge from channels can be placed, it is true from many ports the Port of Baltimore faces a continuous need to maintain channels. In order to maintain shipping channels, serving the Port of Baltimore at their existing authorized depths each year, some 5 million cubic yards of material is dredged from the channels serving the port. If one includes dredging for what we call new work, the total volume of material which must be disposed of in the next 20 years exceeds 100 million cubic yards. In order to place the material, which is dredged from the channels, the State of Maryland must construct new disposal sites, some of which qualify for Federal funding.

Without adequate support for placement of dredge material, the necessary channel maintenance and improvement projects simply cannot take place. This is an urgent problem which requires immediate action, which constitutes the Department's top priority for the Federal fiscal year 1997 funds. Funding is also required for Corps of Engineers' share of actual channel dredging work.

In addition to the ongoing maintenance dredging, there are also numerous channel improvement projects which should be undertaken in the near future. These include deepening of the C&D Canal and connecting channels within the Chesapeake Bay, improvements to Baltimore Harbor anchorages, completion of the deepening of the Brewerton Channel and improvements to the Tolchester Channel. These projects are described in much greater detail below.

The Poplar Island Restoration Project, in the past Maryland has been able to meet its dredge disposal needs by careful use of overboard placement within the Chesapeake Bay waters, and by use of the Hart-Miller Island containment site. Although limited overboard placement of dredge material will continue if and where it can be done without adversely impacting the marine environment, this option will nevertheless provide relatively little capacity.

The remaining capacity of Hart-Miller Island is very limited. Within a period of several years, the Port of Baltimore could exhaust all remaining dredge disposal capacity. In short, in order to meet the dredging needs of the port, we must supplement these measures with other options in the immediate future.

Working with the Corps of Engineers and other Federal and State agencies, Maryland has developed a dredge disposal plan which, if implemented, would address disposal needs through the next 10 to 15 years. The plan calls for five major actions, including a balance of open water disposal, expanded use of existing and proposed containment sites and a development of a new, quote, "beneficial," end of quote, dredge disposal sites.

Mr. FRELINGHUYSEN. If I could just interrupt for one second, I know Congressman Cardin has joined us. I don't know whether there is a possibility of you maybe summarizing or perhaps submitting for the record any particular portions that you would like to emphasize. But I certainly would like to recognize one of our colleagues at some point in time.

Mr. YOSHITANI. I would be happy to do that, Mr. Chairman.

Mr. FRELINGHUYSEN. Your statement, a copy of which we don't have up here, would certainly be included in total in our transcript. But I certainly would want—

Mr. YOSHITANI. Let me just try to summarize visually, if I may. As I said, we have five projects that are of importance to us. Poplar Island, which is the restoration project, this is the one that's perhaps the most expensive from our standpoint and also from the Federal standpoint. We have been working closely with the Office of Management and Budget, the Assistant Secretary of the Army Civil Works and the Corps of Engineers to secure support for this project.

Moving on to the Baltimore Harbor anchorage and channels, this is another portion of our needs and we would appreciate for this project the committee's indication of concern regarding this project by instructing the administration to prepare its fiscal 1998 budget to provide funds to start the project construction.

Thirdly, the Chesapeake and Delaware Canal, this is a very important issue for us, and we request that for this project $1.2 million be included in the fiscal year 1997 appropriations bill.

Mr. FRELINGHUYSEN. I think I may have to ask you to maybe submit your statement in total, because some of my—some of our congressional colleagues are here and I am not sure we are counting on the equal time provision here.

Mr. YOSHITANI. Absolutely.

[The statement of Mr. Yoshitani follows:]

CONGRESS OF THE UNITED STATES
HOUSE OF REPRESENTATIVES

TESTIMONY OF THE
MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND PORT ADMINISTRATION

BEFORE THE APPROPRIATIONS SUBCOMMITTEE
ON ENERGY AND WATER DEVELOPMENT

February 28, 1996

TESTIMONY OF THE MARYLAND DEPARTMENT OF TRANSPORTATION MARYLAND PORT ADMINISTRATION BEFORE THE APPROPRIATIONS SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

Introduction

The Maryland Department of Transportation is pleased to present testimony regarding various proposals related to the channel system serving the Port of Baltimore. At the outset, the Department expresses its appreciation for the committee's continuing support of Corps of Engineers activities, which are vital to the interests of the ports throughout the country.

The Port of Baltimore is a major factor in the economy of the State of Maryland. Each year the port generates some $2 billion in statewide economic impact, and contributes, each year, $400 million in United States customs receipts and approximately $25 million to the Harbor Maintenance Trust Fund. Some 87,000 jobs are directly or indirectly related to port activity, of which nearly 63,000 are located in Maryland.

The economic vitality of our port is in large part dependent on the ability to maintain and improve the 125 miles of channels that connect it to the ocean. The port is served by a two-pronged channel system. Channels which approach the port from the south -- from the mouth of the Chesapeake Bay -- are maintained at an authorized depth of fifty (50) feet. Channels leading to and from the north -- via the Chesapeake and Delaware Canal (the C&D Canal) -- are maintained at an authorized depth of thirty-five (35) feet. The southern approach is used by both deep draft bulk cargo carriers and container ships; whereas the C&D Canal system, which is in essence a short cut to and from points north, is especially important for container ships carrying high value cargo.

The project which deepened Baltimore's southern approach channels to 50', was the first deep draft channel authorized in the nation. (It was authorized in 1970.) The work was accomplished in accordance with the cost sharing provisions of WRDA '86, with the state paying $70 million towards the dredging, and an additional $60 million to provide a dredged material containment site at Hart-Miller Island.

This project was a significant milestone for the Port of Baltimore. However, the need for channel work did not end with this one project. A decade later, there are a number of new projects, continuing requirements, and "completion of old business" for the Port that will require attention.

Foremost among these are projects at which material dredged from ship channels can be placed. As is true for many ports, the Port of Baltimore faces a continuous need to maintain channels; in order to maintain shipping channels serving the Port of Baltimore at their existing authorized depths, each year some five million cubic yards of material is dredged from the channels serving the Port of Baltimore. If one includes dredging for "new work" projects, the total volume of material which must be disposed of in the next twenty years exceeds 100 million cubic yards. In order to place the material which is dredged from the channels, the State of Maryland must construct new disposal sites, some of which qualify for federal funding. Without adequate support for placement of dredged material, the necessary channel maintenance and improvement projects simply cannot take place. This is an urgent problem which requires immediate attention, and which constitutes the Department's top priority for federal FY 97 funds.

Funding is also required for the Corps of Engineers' share of actual channel dredging work. In addition to the ongoing maintenance dredging, there are also numerous channel improvement projects which should be undertaken in the near future. These include deepening of the C&D Canal and connecting channels within the Chesapeake Bay, improvements to Baltimore Harbor anchorages, completion of the deepening of the Brewerton Extension Channel, and improvement to the Tolchester Channel.

These projects are described in greater detail below.

Poplar Island Restoration Project

In the past, Maryland has been able to meet its dredge disposal needs by careful use of overboard placement within Chesapeake Bay waters and by use of the Hart Miller Island containment site. Although limited overboard placement of dredged material will be continued -- if and where it can be done without adversely impacting the marine environment – this option will nevertheless provide relatively little capacity. The remaining capacity of the Hart Miller Island site is very limited. Within a period of several years, the Port of Baltimore could exhaust all remaining dredge disposal capacity. In short, in order to meet the dredging needs of the port, we must supplement these measures with other options in the immediate future.

Working with the Corps of Engineers and other federal and state agencies, Maryland has developed a dredge disposal plan which, if implemented, would address disposal needs through the next ten to fifteen years. The plan calls for five major actions, including a balance of open water disposal, expanded use of existing and proposed containment sites, and development of new "beneficial use" dredge disposal sites.

The Poplar Island Project is one of the more significant elements of our plan and is essential for the continued viability of the Port of Baltimore. It would provide a new placement site for dredged material through the restoration of an eroding island. Most likely to be undertaken in phases, the project could ultimately provide up to 38 million cubic yards of capacity. The project is the result of a several year cooperative effort involving Maryland Port Administration, other state, federal and local agencies and the Baltimore District Corps of Engineers, and has received unanimous support from the state and federal agencies involved. Poplar Island would be restored to its approximate size in the mid 1800's. The restored island would creates a significant amount of new wildlife habitat and intertidal wetlands.

Both the House and Senate Appropriations Committees in their consideration of the Energy and Water Development Appropriations Act of 1996 recognized the importance of the Poplar Island Project and urged the Corps to support its implementation.

The project report is essentially complete. Final approval by the Corps of Engineers is expected shortly. The Project Cost-Sharing Agreement (PCA) is under negotiation with the Corps and will be signed in time to begin construction in Summer 1996. Fiscal year 1997 will be the peak construction year for the contract under which the dike will be constructed. This contract will be completed in early FY 1998.

Construction of the dike enclosing the island has been estimated by the Corps of Engineers to cost $63 million. We intend to implement the project in phases, with the first phase encompassing approximately one half of the ultimate island configuration. Construction cost for the Phase I dike is estimated to be $44 million. Using the Section 204 program's 75% - 25% funding mechanism, approximately $12 million in federal funds would be required in FY 1996 and $21 million in FY 1997 for this part of the project. Additional funding would be required in following years for additional project activities.

We have been working closely with the Office of Management and Budget, the Assistant Secretary of the Army (Civil Works) and the Corps of Engineers to devise an acceptable plan to secure the necessary funding for the project. The federal program under which the Corps intends to fund the project is the Section 204 program. It is , however, currently authorized at a $15 million annual ceiling, and has in the past been funded at a much lower level. We have asked the Administration to allocate whatever funds might be available out of FY 96 and prior appropriations. Maryland has indicated its willingness to finance both its share of Phase I, and, if necessary and contingent upon an acceptable reimbursement agreement, to advance a portion of the federal share of the project to assure timely completion of the dike.

In order to provide funding for FY 97, we ask that the Committee appropriate the full $15 million currently authorized for the program.

Baltimore Harbor Anchorages and Channels, MD

This project involves the enlargement and improvement of various anchorages and connecting channels within the Port of Baltimore. It is the result of a study which the Corps has had underway for a number of years, and which will soon be ready to move into the pre-construction, engineering and design (PED) phase.

With nearly 2,500 ships using the port facilities annually, there is an obvious need to expand the existing anchorage areas. Many of these ships are 900' to 1000' in length, compared with 500' in length when the anchorages were designed and constructed. The cost shared feasibility study which commenced in 1993 is nearing completion. The anticipated favorable recommendation is producing a project with a benefit cost ratio of nearly 10 to 1. The new and improved branch channels will increase the maneuverability of larger vessels, thus decreasing the time required to shift to and from berthing areas.

In order to continue work on this very favorable project, we are asking that $400,000 be included in the FY 1997 Appropriations Bill for (PED). This would allow the design effort to commence, consistent with the Corps concept of seamless funding, while the feasibility report is undergoing the Washington review and processing for authorization.

We would also appreciate the Committee's indication of concern regarding this project by instructing the Administration to prepare its FY 98 budget to provide funds to start project construction. Total project construction cost is estimated to be $32.6 million, with a federal share of $24.5 million.

Chesapeake and Delaware Canal
Baltimore Harbor Connecting Channels (Deepening), DE & MD

The Chesapeake and Delaware (C&D) Canal is an integral component of the Port of Baltimore's ship channel system. It provides a short cut for vessels traveling between Baltimore and ports in the northeast and Europe. About half of all breakbulk and container tonnage through the Port of Baltimore utilizes the Canal.

The present canal dimensions (35' depth) were authorized in 1954 and the connecting channels were authorized in 1958. Vessel characteristics and traffic levels have substantially increased since that period of time. The current study is examining the feasibility of deepening the channel system, most likely to 40' depth. Substantial benefits from improvements to the canal and connecting channels are likely to occur by transporting cargoes in larger vessels or by avoiding the alternative deeper draft route around the Delmarva Peninsula, which adds up to 150 miles for each vessel trip.

The cost shared feasibility study commenced in 1990 and is nearing completion. Based on the draft report, we fully expect a favorable recommendation for this urgently needed project. PED is scheduled to commence in October 1996, and be completed by September 1999. The current PED estimate (federal and state funds) is approximately $4,500,000.

We request that $1,200,000 be included in the FY 1997 Appropriations Bill for PED activities.

Baltimore Harbor and Channels:
Operation and Maintenance Dredging

We request an appropriation of $11,000,000 for maintenance dredging of channels that are within the jurisdiction of the Baltimore District; i.e., the 35' deep connecting channels between Baltimore and Pooles Island leading toward the C&D Canal and the 50' deep channels leading from Baltimore southward down the Chesapeake Bay. This funding is essential to maintain channels at the existing authorized depth, and, given the competitive nature of maritime commerce, is of vital importance for the Port of Baltimore.

Tolchester S Turn

The Tolchester Channel, a C&D Canal approach channel, has a significant "S-turn." Ships change course five times within three miles, often beginning a new turn, sometimes in the opposite direction, before completing a first turn. With ships approaching 1,000 feet in length, it is becoming difficult to safely navigate the channel, especially in winter months when poor weather, ice, wind and tide conditions prevail. The Maryland Association of Pilots indicates there have been two recent groundings in the area, and that there have been a greater number of "near misses." The Association urges that the Tolchester Channel S-turn be modified as soon as possible. The cost to straighten the S-Turn is approximately $12 - $14 million.

The Corps is nearing completion of a report on Tolchester, prepared at the direction of the Committee. Preliminary discussions with the Corps suggests that the urgency of the current situation, and the need for immediate action may not be fully recognized.

We therefore request that the Committee direct the Corps to complete the necessary design documents in FY 1997, using a portion of the $11 million in funds requested above for operation and maintenance activities in the Baltimore District. Further, we request that the Committee instruct the Corps to correct the problem at the earliest possible date. In this regard we would request that the Administration be asked to budget funds for a continuing contract to construct the project in FY 98.

C&D Canal and Approach Channels
Operation and Maintenance Dredging

Funds in the amount of $11,600,000 are recommended for maintenance dredging and for operation of the C&D Canal and its approach channels within the Philadelphia District. This funding is essential to maintain channels at the existing authorized depth, and, given the competitive nature of maritime commerce, is of vital importance for the Port of Baltimore. This is especially important for Port of Baltimore channels within the Philadelphia District's jurisdiction, inasmuch as these are subject to rapid rates of shoaling.

Sandy Point

A portion of the recommended funds would also be used to correct a navigational safety problem at Sandy Point. A destabilized embankment at Sandy Point, located at the western entrance to the C&D Canal, has created shoals adjacent to the shoreline which in turn are creating potentially dangerous cross currents within the canal. These currents have made navigation of vessels at this point in the canal more difficult and, if not corrected, might pose a safety project. The Association of Maryland Pilots has recommended that the embankment be repaired as soon as possible. The Corps has reviewed the situation and has determined that the work can be accomplished under the maintenance program. The Committee has recognized the problem and in the FY 1995 Appropriations Report urged the Corps to correct the situation using operation and maintenance funds. The Corps accomplished part of the needed stabilization last year, and is monitoring and evaluating the results. We expect some additional work will be required in FY 1997.

Brewerton Extension Channel

This project might be categorized as "completion of old business". The Brewerton Extension Channel connects the channels within the Port of Baltimore to the approach channels to the C&D Canal. It was authorized as one element of a major navigation project, which Congress authorized in 1958. Although the rest of the project was dredged to the dimensions authorized by Congress in 1958, the Brewerton Channel remained at 27' for many years. In the mid 1980's, it was decided to dredge the channel to its authorized dimensions of 600' wide by 35' depth. In a cooperative effort to save money, the State of Maryland, the Corps of Engineers and the Association of Maryland Pilots agreed to limit the width of the deepened section to 450'. The remaining 150' width of the channel was never deepened. This deepening preceded the enactment of WRDA '86 and was financed entirely by the federal government.

In the past decade, the ships using the Brewerton Channel have increased in size (particularly in width and length). The 450' width is significantly less than channels at other ports which accommodate similar ships. The Association of Maryland Pilots has recommended proceeding with the deepening to 35' over the remaining 150' width of the channel.

Later this fiscal year, the Corps will complete a Limited Reevaluation Report, consistent with funding and Committee guidance provided in FY 1996. We expect favorable results based on economic and safety considerations. We request that the Committee instruct the Corps to complete design work for the project in FY 97 funds, and instruct the Administration to budget funds for construction of the project beginning in FY 98.

The total estimated cost of the project is approximately $14 million, with a federal share of $10.5 million.

* * * * *

In conclusion, we express our appreciation to the Subcommittee for its consideration of these proposals. We applaud the efforts of the Congress to continue the much needed improvement of our nations harbors and channel systems, and Maryland looks forward to doing its part in this cooperative effort.

Mr. FRELINGHUYSEN. But Congressman Cardin is here. Congressman Gilchrest is here and Congressman Ehrlich is here. I am not sure where in the overall scheme of things everybody's testimony is going to fit.

Mr. CARDIN. And our Secretary of Transportation is also here.

Mr. FRELINGHUYSEN. And your name, just for the record?

Mr. WINSTEAD. David Winstead.

Mr. FRELINGHUYSEN. Thank you very much for being here. We got off to a relatively fast start here. I certainly wanted to recognize the Members of Congress who have taken time out of their busy schedule to be here to make a case for, I presume, just about all the items that are listed. Congressman Cardin.

Mr. CARDIN. Thank you, Mr. Chairman. I will be very brief. First, I want to acknowledge the presence here of Helen Bentley. I know she has already been recognized, but Helen Bentley has been the real champion, I think, in our country on U.S. shipping and on dredging issues. And it is a pleasure to have her here today, and we thank her for her past help and she is a great help to us in the State of Maryland on this issue.

I think you will find unanimous support within our delegation for Federal participation for use of the pilot funds for beneficial use for the dredge spoils for the Poplar Island dredging site. It is extremely important to the competitiveness of U.S. shipping. It is extremely important to the competitiveness of our port and to the economy of our region. We believe it is appropriate and has the support of our entire delegation, and I am here today to emphasize the absolute first priority of our State in Federal participation for this extremely important project.

Mr. FRELINGHUYSEN. Thank you, Mr. Cardin.

Mr. Gilchrest.

Mr. GILCHREST. I would just very quickly like to welcome Helen to Washington. The Second District of Maryland is represented by two able people, Bobby Ehrlich and Helen Bentley.

I would also like to echo the words of Ben, and I am sure Steny earlier, and what Bobby will say, one of the major problems coastal ports have in the United States is dredging, one; dredging toxic material, two; and finding places, which is three, to put the stuff. And this is a particular project.

Poplar Island is an island in the Chesapeake Bay that was rather large and it has almost disappeared now, but it is a habitat for migrating waterfowl and a whole host of other things. So this is an environmental program. It is an economic program. It is a positive program for not only the State of Maryland, but it sets a pretty powerful precedent for future dredging needs.

Mr. FRELINGHUYSEN. Thank you. Congressman Ehrlich. Thank you for being with us as well.

Mr. EHRLICH. Helen, I picked up your dry cleaning today.

There is nothing that I can add that would be original. We have the foremost expert in the country, Ms. Bentley, my predecessor, who is just a wonderful leader on this issue. Poplar Island is the priority for us. Working together, we all believe how important this issue is obviously to the Port of Baltimore. You all know the facts and we have our great Secretary of Transportation here today, as well, to articulate our case, Mr. Chairman. Thank you for your time.

Mr. FRELINGHUYSEN. Thank you, Congressman.

Back to you, Mr. Winstead. Part of your remarks and presentation, I think, have been presented by Mr. Yoshitani.

Mr. WINSTEAD. That is correct. I want to acknowledge and say that I appreciate at this time our distinguished delegation that is here in support of this project and our dredging plan. We welcomed you earlier last year, I believe, to Hart-Miller Island, which is another classic project.

Mr. FRELINGHUYSEN. Fascinating. I learned a lot. Maybe we could do something in our own port area of New York, New Jersey.

Mr. WINSTEAD. Anyway we can share with you, let me know.

Very specifically, just to mention and second our distinguished delegation, we are specifically interested in the Poplar Island and overall program, the Federal funds under Section 204. And this program has been funded at a level much lower than the current $15 million annual ceiling. We have asked the administration to allocate funds from the fiscal year 1996 and prior year appropriations.

In order to provide funding for fiscal year 1997, we ask the committee to appropriate the full $15 million authorized for this project. The Poplar Island project is the most important, and we are proceeding on phase 1 and have allocated funds in our capital program of the State in terms of State support for this.

Mr. FRELINGHUYSEN. As Mr. Bevill said earlier, we look forward to working with you, continuing to work with you, and relying on each and every one of you for your assistance.

Mr. HOYER. Mr. Chairman, before you close and before we end our testimony, I think it would be appropriate, this—the dredging of Baltimore Harbor was a very controversial item in our State for many years as a result, frankly, of the opposition of one of Mrs. Bentley's predecessors with whom Mr. Bevill served for many years.

I had the opportunity to go on the Appropriations Committee in January of 1983, which complicated the situation because I was a very strong supporter of the dredging of the harbor. I think it would be appropriate for all of us to acknowledge that under the leadership of Chairman Bevill this matter was begun, undertaken, a commitment was made by this committee, which was really in the leadership, and when Mrs. Bentley and Mr. Cardin later came and joined, we worked very closely. But ultimately, it was the leadership of Mr. Bevill and this committee, and Mr. Myers, as the ranking member, who were very supportive of this effort and this, of course, is a continuation of the work that was done.

Obviously, as was pointed out in the testimony, and as you so well know in your own experience in your own State, the port of New York, this is an ongoing, you never solve the problem, you just have to stay after it year after year in order to keep your port dredged and competitive in world markets.

But we appreciate very much Chairman Bevill's leadership and Chairman Myers' leadership on this issue.

Mr. FRELINGHUYSEN. Thank you very much.

Mr. BEVILL. Thank you, Sten.

Mrs. Bentley certainly deserves a lot of credit, as you and others have pointed out. I remember this was one of her prime interests when she was here.

And we miss you, by the way.

Mrs. BENTLEY. Thank you, Mr. Bevill.

Mr. HOYER. Mr. Frelinghuysen, we would point out that the Democrats took very good care of the Republicans.

Mr. FRELINGHUYSEN. I heard that.

Mr. BEVILL. We know where the power is. And we learned it the hard way.

But you all are a great delegation to work with, you always have been and you have had some mighty fine people here in the past, too.

Mrs. BENTLEY. I might point out, Mr. Bevill, that some of your good friends were among those who started all of our channel projects, Mr. Garmatz and Mr. Fallon and Mr. Friedel, when they were all Chairman of various committees here. And I know they were all your good friends and they were our good friends, too.

Mr. BEVILL. Mr. Friedel, I remember we always had to take care of him because he took care of us on all the pay raises, you know.

Mr. FRELINGHUYSEN. Thank you, all of you, for being here. Mrs. Bentley, all of you. Thank you very much.

Mrs. BENTLEY. Thank you. Thank you for your support.

WEDNESDAY, FEBRUARY 28, 1996.

CORPS OF ENGINEERS FLOOD CONTROL PROGRAM

WITNESS

SCOTT FABER, DIRECTOR OF FLOODPLAIN PROGRAMS, AMERICAN RIVERS

Mr. FRELINGHUYSEN. Mr. Faber, Mr. Scott Faber, will testify next, Director of the Flood Plain Programs, American Rivers. Is he here?

All right. If you can take a seat and a microphone. And, again, the full text of your remarks will be included in the record, if you would proceed.

Mr. FABER. Thank you, Mr. Chairman. I appreciate the opportunity to testify before this committee. It is my first time. My father was a member of the Corps in the 1950s, so I became familiar with the agency at an early age, and I know he is very proud of many of their projects.

I am sure we all agree that the Nation needs flood damage reduction policies that protect people, property, the Nation's environment and the taxpayer. Unfortunately, despite spending more than $38 billion on levees and dams, flood losses have more than tripled since 1951, when adjusted for inflation to more than $4 billion annually, according to the Senate Natural Disaster Task Force.

Rather than addressing the causes of this increased flooding, agricultural and urban land uses that increased over land flow and inappropriate and sometimes risky flow plain development, our flood damage reduction policies have inadvertently encouraged poor land use decisions and then compensated for higher flood losses by building structures that temporarily protect some communities, often at the expense of other often poorer communities and flood plain farmers.

The consequences of public and private decisions to drain urban and agricultural lands are felt every day in flood plain communities, where embattled public works agencies like the Corps and private levee districts continue to fight losing battles against past and present land use practices that increase over land flow. Images of volunteers placing sand bags on levees, presumably fighting Mother Nature, are more accurately images of upstream and downstream communities fighting each other.

Throughout the Nation, land that had once absorbed rainfall has been drained quickly, engineered to drain quickly to reduce upstream property losses. At the same time that our rivers are rising faster, more and more people are moving into flood plains. The National Flood Insurance Program, which was, as you know, created in 1968 to reduce disasters costs has made the development of many flood prone areas economically impossible.

Our overreliance on structural solutions has also in some cases created a false sense of security that has further encouraged the development of flood prone areas, multiplying the consequences of a levee's inevitable failure. Programs that have assumed responsibility for flood losses, programs that have paid for disaster relief, paid for the construction and the repair of structural projects, have in some cases eliminated the incentives for strong flood plain and watershed management by State and local government.

Relying solely on structural solutions to compensate for land use practices has dramatically altered many of the natural processes by which our rivers sustain fish and wildlife populations. As a representative of American Rivers, the Nation's leading reservation conservation group, I can assure you that linkages between a river and its flood plain are critical for maintaining healthy river systems.

During periods of high water, fish and wildlife migrate out of the main channel and on to the flood plain to use newly available habitat. As flood waters recede, nutrients and other important resources from the flood plain are transported back into the river.

In addition, flood control dams often interrupt the transport of nutrients and sediment, block the migrations of fish and dramatically alter the temperature and chemical composition of water.

As our resources grow more scarce and this subcommittee is forced to make more and more difficult decisions, it is important that we find ways to simultaneously meet our economic and our environmental objectives for water resources, at the same time that Corps spending is expected to decrease by 30 percent.

The costs of operating and maintaining existing projects which already consumes more than half of the Corps' annual appropriations will continue to increase. By the turn of the century, many of the structures in the Corps' $125 billion inventory of water resources projects will have reached their design life and will require rehabilitation.

As we build new projects, we must be aware that those projects will obviously add additional operations and maintenance costs.

American Rivers believes that structural projects will continue to be an appropriate solution in many cases, but a policy that solely relies on levees and dams will not protect people, property, the environment or the taxpayer. Instead, we believe that Congress should give communities the tools and incentives they need to develop strong local flood loss mitigation programs.

To do this, Congress should link cost-sharing to strong State and local floodplain and watershed management, expand Corps technical assistance programs to give communities the tools they need to manage their flood plains and watersheds to reduce flood losses and clearly instruct the Corps to consider all solutions, both structural and nonstructural, that can be used to reduce flood losses, even if those solutions may lay outside the Corps' jurisdiction.

Many of the techniques that can be used to reduce flood losses, techniques that are not often recommended by the Corps, are the same techniques already used by many land owners to reduce polluted runoff from farms and city streets and to reduce erosion.

In the wake of the Great Flood of 1993, thousands of flood-weary Midwesterners voluntarily relocated more than 8,000 homes and businesses and voluntarily retired more than 90,000 acres of very flood-prone farmland. And since that historic flood, communities throughout the Midwest have initiated dozens of watershed-wide planning efforts to reduce flood losses.

Before we start new flood control projects, we urge you to require that the Corps adequately consider alternatives that simultaneously reduce flood losses and protect the Nation's environment. We urge you to give communities the tools and incentives they need to properly flood their floodplain and watersheds.

[The statement of Mr. Faber follows:]

American Rivers

Testimony of

American Rivers

on

Energy and Water Appropriations Bill , 1997

Before the Subcommittee on Energy and Water

House Committee on Appropriations

February 28, 1996

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a member of Earth Shar

Mr. Chairman, thank you for the opportunity to testify today on the Energy and Water Appropriations Bill for the Fiscal Year 1997.

Our nation needs flood damage reduction policies that protect people, protect property, protect the environment, and protect the taxpayer. Despite spending more than $38 billion on levees and dams, flood losses have more than tripled since 1951, when adjusted for inflation, to more than $4 billion annually. Rather than addressing the causes of increased flood losses -- agricultural and urban land uses that increase overland flow and inappropriate floodplain development -- our flood damage reduction policies have encouraged poor land use decisions and then compensated for higher flood losses by building structures that temporarily protect some floodplain communities at the expense of other, typically poorer floodplain communities and farmers.

The consequences of public and private decisions to drain urban and agricultural lands are felt everyday in floodplain communities, where embattled public works agencies like the Corps of Engineers and private levee districts continue to fight losing battles against past and present land use practices that increase overland flow. Images of volunteers placing sandbags on levees, presumably fighting Mother Nature, are more accurately images of upstream and downstream communities at war with each other. Throughout the nation, land that had once absorbed rainfall, recharging wetlands and groundwater supplies, has been engineered to drain quickly to reduce upstream property losses. At the same time our rivers are rising faster, more people are moving into floodplains.[1] The National Flood Insurance Program, created in 1968 to reduce spiraling flood losses, has made the development of many flood-prone areas economically possible. Our over-reliance on levees has created a false sense of security that has further encouraged the development of flood-prone areas, multiplying the consequences of a levee's inevitable failure. New Deal programs that assumed responsibility for flood losses by building and repairing levees and by providing relief with no strings attached have eliminated incentives for strong floodplain and watershed management by state and local government.

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[1] Federal Interagency Floodplain Management Task Force, Floodplain Management in the United States: An Assessment Report, 1992. By the late 1970s, 3.5 million to 5.5 million acres of floodplain land had been developed for urban use nationally, including more than 6,000 communities with populations of 2,500 or more. Annual population growth in these floodplain areas was between 1.5% and 2.5%, roughly twice that of the country as a whole.

Relying solely on levees and dams to compensate for poor floodplain and watershed management has dramatically altered many of the natural processes by which rivers sustain fish and wildlife populations. Linkages between a river and its floodplain are critical to maintaining river health. During periods of highwater, fish and wildlife migrate out of the channel and onto the floodplain to use newly available habitat and resources. As floodwaters recede, nutrients and organic matter from the floodplain are transported into the river. Flood control dams interrupt the transport of nutrients and sediment, block the migrations of fish, and dramatically alter the temperature and chemical composition of water. Dams operated by the Corps in the Columbia Basin, for example, are largely responsible for the decline of Snake River salmon runs.

As federal resources grow more scarce, we must fund ways to simultaneously meet out economic and environmental objectives for water resources.

At the same time that Corps spending is expected to decrease by 30 percent, the costs of operating and maintaining existing projects, which already consumes more than half of the Corps' annual appropriations, will continue to increase. By the turn of the century, many of the structures in the Corps' $125 billion inventory of water resources projects will have reached their design life and require rehabilitation. Building new projects will only add to future O&M costs.

American Rivers believes that structural flood control projects will continue to be an appropriate solution. We support a proposal, for example, to raise existing levees to protect the City of Sacramento. But a policy that relies solely on levees and dams will not protect people, property, the environment and the taxpayer. Instead, we believe that Congress must give communities the tools and incentives they need to develop strong local flood loss mitigation programs. To do this, Congress should link cost-sharing to strong state and local floodplain and watershed management, expand the Corps' technical assistance programs to give communities the tools they need to manage floodplains and watersheds to reduce flood losses, and clearly instruct the Corps to consider all solutions -- both structural and non-structural -- that can be used to reduce flood losses, even if those solutions lie outside the agency's jurisdiction. Many of the techniques that can be used to reduce flood losses are the same techniques -- techniques like conservation tillage and restoring buffers along streams -- already used by many landowners to reduce non-point source pollution and erosion.[2]

In the wake of the Great Flood of 1993, thousands of flood-weary Midwesterners rejected higher levees and instead voluntarily relocated more than 8,000 homes and businesses and retired more than 90,000 acres of flood-prone farmland. And, since that historic flood, communities throughout the Midwest have initiated dozens of watershed-wide planning efforts to reduce future flood losses. This month, representatives of industry, agriculture and environmental groups met for the first time ever to discuss steps that we could take together reduce flood losses, support navigation and protect the health of the Upper Mississippi River, including floodplain and tributary restoration projects, improved dam operations, improved watershed management, and retrofitting channel training structures to meet the needs of navigation and nature. The Environmental Management Program will play an important role in these efforts and should be expanded to reverse the spiraling decline of the nation's great river. [See Attached]. Our other inland waterways will require environmental investments as well, and American Rivers strongly supports full funding for the Corps' Section 1135 Program, the Missouri River Mitigation Program, ongoing efforts to restore the Everglades, and steps to restore lost salmon runs to the Columbia River Basin.[3]

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[2] Robbins, Richard W., Glicker, Joseph, L., Bloem, Douglas M., Niss, Bruce M., Effective Watershed Management for Surface Water Supplies, Denver: American Water Works Association Foundation, 1991.

Before we start new flood control projects, we must reform our flood damage reduction policies to protect people, property, the environment and the taxpayer. In particular, American Rivers strongly supports the delay of flood control projects proposed for the Cheat River, the Trinity River near Houston, the Los Angeles River, the Big Sunflower River, and the Red River of the North until our outdated policies can be reformed. We strongly oppose proposals to construct a dam on the American River and to destroy 11,400 acres of Lower Mississippi River Delta wetlands to raise existing levees. In each of these case, we believe that the

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[3] American Rivers proposes 1) collaborative development of surface bypass systems by the Corps, state fishery agencies, and Indian tribes; 2) responsibility for operations and maintenance of power and fish facilities at Columbia Basin dams be given to the Bonneville Power Administration; and 3) the subcommittee appropriate $35 million per year for two years to implement a Minimum Operating Pool on John Day reservoir.

Corps has inadequately considered alternatives that simultaneously reduce flood losses and protect the environment. We urge you to give communities the tools and the incentives they need to manage their floodplains and watersheds.

Thank you. I would be happy to answer any questions.

Towards a Self-Sustaining River:

A Three-Part Strategy to Restore the Upper Mississippi River

February 1, 1996

A Joint Statement by:

American Canoe Association, American Rivers,
Cannon River Watershed Partnership, Citizens for a Better Environment,
Coalition for a Clean Minnesota River, Environmental Defense Fund, Friends of the Earth,
Friends of the Rock River, Friends of the Mississippi River, Greenway Network,
Indigenous Environmental Network, Iowa Audubon Council, Iowa Natural Heritage Foundation,
Izaak Walton League of America, Minnesota Center for Environmental Advocacy,
Mississippi River Basin Alliance, Mississippi River Revival, Missouri Coalition for the
Environment, Natural Lands Institute, Natural Resources Defense Council,
River Network, Sierra Club.

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For additional copies , contact American Rivers at 202-547-6900 or the Environmental Defense Fund at 202-387-3500.

Executive Summary

The Mississippi River is the hardest working river in America: a central artery for commerce, a stormwater management system for the two-thirds of the nation, the central flyway for 40 percent of the nation's migratory waterfowl, the heart of our country's breadbasket More than 12 million people visit the river every year -- four times more than Yellowstone National Park -- spending more than $1.2 billion and supporting 18,000 jobs.

It should be no surprise that the Upper Mississippi River is showing signs of wear and tear. The dams that make the river reliably navigable and the levees that make floodplain agriculture possible have interrupted many of the natural processes that made the Mississippi one of the world's most biologically productive rivers. The scientists who monitor the health of the Mississippi tell us that key links in the river's food chain -- aquatic plants, mussels and insects -- are beginning to disappear and warn that fish and waterfowl may soon follow. This sequence of events has unfolded whenever you dam and channelize a river, and our river experts are telling us that it is happening with increasing speed

The original Mississippi River flourished because of its diversity and dynamic change High water in the spring and low summer flows provided a broad, fluctuating range of water depths throughout the river and its floodplain. Areas of deepwater, backwater marsh and lake, turbid and clear water, wetter and drier forests and all the transitions in between provided different habitats for a wide diversity of plants and animals As backwaters, sloughs and other habitats that support fish and wildlife were lost, new habitats were created during periods of high flow Water provided the force that created and recreated these habitats, eroding, carrying and depositing sediment, filling some pools and channels but creating others Movement of water onto and from the floodplain transported sediment, organic materials, nutrients and allowed river life to flourish in seasonally flooded habitat Periods of both high and low water provided critical moments of creation

These natural forces have been eliminated Army engineers built thousands of wingdams and closing structures to confine the river's energy to a central channel Tributaries were channelized as they passed through the floodplain, which was cut off from the river first by private and later public levees Habitats destroyed by impoundment were replaced with tens of thousands of acres of new habitats But while pools inevitably fill in, islands erode, and backwaters and sloughs are lost, the river has lost its power to create and sustain new habitat.

Each of the river's distinct forms of habitat is disappearing backwater marshes dominated by emergent plants are filling in or, alternatively, becoming open, lifeless turbid waters, floodplain lakes have filled with silt, aquatic plants are not replaced because perpetually turbid waters block light penetration, sediment buries mussel beds and deepwater pools, islands erode, eliminating mast-producing forests High water tables undermine floodplain forests, which lack higher ground to replace themselves Restrictions of fish movement by the dams makes the decline of habitat in a particular pool more significant by blocking fish access to habitats in another pool
These problems are exacerbated by current river uses, and by past and present land uses that have

altered basinwide hydrology and accelerated the rate at which sediment enters the river. Sediments and nutrients enter the river at unsustainable rates due to past and present land use practices that increase erosion and eliminate wetlands and stream-side buffers. Commercial and recreational vessels resuspend sediments in the water column, blocking light penetration and contributing to the loss of backwaters. Many of these sediment are contaminated with chemicals that make some river fish unsafe for human consumption. Introduced species threaten to overwhelm native species and water supply infrastructure.

Even in its reduced form, the Upper Mississippi represents the last piece of Midwestern America's Great Rivers, supporting migrating waterfowl, endangered mussel species and the most ancient lineage of fish in North America. Whether this system continues to survive and flourish -- or collapses like the Illinois -- depends on whether dynamic river forces can be sufficiently restored to make the river system self-sustaining. Preserving and restoring the Upper Mississippi and Illinois rivers requires three types of actions:

1. Recreate dynamic river forces to achieve self-sustaining habitat restoration.

Resource managers must design restoration projects to recreate dynamic river forces while simultaneously supporting sustainable levels of navigation and protecting floodplain agriculture. Immediate opportunities exist to restore and utilize the force of river tributaries as they cross the floodplains, to add floodplain habitat offered by willing sellers, and to provide for occasional low water levels during late spring and summer to improve sediment consolidation and trigger plant reproduction. More research needs to be done to determine how main channel river forces can be marshalled to recarve backwater habitat and to recreate deeper pools near the main channel.

2. Minimize the operational impacts of the navigation system.

The navigation industry, Coast Guard and Corps of Engineers must take steps to minimize the operational impacts of navigation on the Upper Mississippi River. Barge tows resuspend sediments -- some of which are contaminated with toxic materials -- and generate wakes that contribute to backwater loss. The placement of dredge spoil impacts the health of floodplain resources. The introduction of foreign species threatens the long-term health of the river's native inhabitants. Few steps have been taken to reduce the risk of catastrophic spills. All of these issues can be addressed with little impact on the navigation industry.

3. Achieve no net increase in sediment by 2010.

Sediment will continue to enter the Upper Mississippi River at unsustainable levels for many years. Nevertheless, resource managers must begin today to set long-term goals for sediment reduction and watershed restoration so that the Upper Mississippi River will reach an acceptable state of equilibrium tomorrow. Resource managers need to identify and address tributaries that are contributing the most sediment to the river, and to identify measures that will reduce erosion, non-point source pollution and restore hydrologic integrity. Our goals should be to reduce inputs of sediment in each pool so that they equal the quantity of sediments exiting that pool.

I. Recreate Dynamic River Forces

A. Manage Water Levels

For large floodplain rivers like the Mississippi, seasonal floods and periods of low water shaped the diversity and productivity of river species During periods of highwater, fish and wildlife migrate out of the channel and onto the floodplain to use newly available habitat and resources As floodwaters recede, they transport nutrients and food from the floodplain into the river

By occupying large areas of bottomlands, the original Mississippi River ensured that some portion of the floodplain would meet the habitat requirements for a wide variety of species. The critical zone is the shallow water boundary where fish and waterfowl can concentrate their feeding Because that boundary moves across the floodplain during high water, the entire area flooded in any year can be exploited by fish and migrating waterfowl.

Low water periods are equally critical During low water stages, sediments dry out, compact and release nutrients. Many marsh plants depend upon the exposure of sediments for successful germination. Even in areas that remain inundated, the reduced turbidity associated with low water permits more light to penetrate to the bottom, allowing plants to germinate Because of the critical role healthy aquatic plants play in stabilizing sediment, high or low levels of suspended sediment launch either a vicious or benign cycle High levels of turbidity block light from reaching aquatic plants, preventing their regermination and leading to fewer plants, less stabilization of sediment and even higher levels of turbidity. Low levels of turbidity lead to healthier aquatic plants and, conversely, even lower levels of turbidity.

The transformation of the river into a series of pools has changed water levels most dramatically by eliminating, or even inverting, low water periods in two-thirds of the pools The upper portion of most pools retain a relatively natural flood pulse But the operation of the navigation dams has converted the former floodplain/channel complex in the middle portions of the pools into largely permanent shallow water areas Managed properly, areas can function as extensive marshes or areas of submerged aquatic plants. Absent low water levels, they can become shallow deserts of turbid sediment. The lost marshes of Weaver Bottoms in Pool 5 below Wabasha, Minnesota, and the declining wild celery beds in Lake Onalaska above LaCrosse, Wisconsin, illustrate the consequences of permanently high water levels in the midpools.

The lower pools have a similar problem. Some remain permanently high. Others with mid-pool control points may be drawn down precisely when the river has high water flows to prevent the upper portions of the pools from flooding. The probable effects of these unnatural drawdowns during high flow periods is to disrupt species that are adjusted to using the floodplain in these periods of high flow.

The solution is to release water from the dams and lower water levels in the pools at least some years when river flows naturally drop. In 1994, water level drops were conducted in Pools 24, 25 and 26 and resulted in expected positive impacts on plants. A similar benefit occurred on Lake Chautauqa along the Illinois River where a levee permits controlled water management. Although the ecological necessity of low water periods is clear, much remains unknown about the biological response to low water levels at different depths, seasons, durations and frequencies. Different forms of low water levels will also have differing impacts on vegetation.

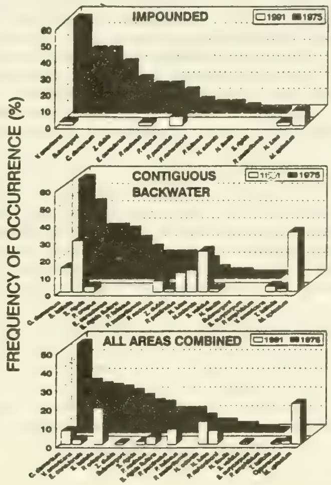


Figure 2. Frequency of occurrence for individual aquatic macrophytes in impounded, contiguous backwaters and all areas combined, 1975 and 1991, Navigation Pool No. 8, upper Mississippi River.

The impacts of water level management on river users must be carefully considered. While some low water levels may prevent navigation for short periods, others may only reduce the navigation depths slightly for short periods, and still others may have no impact on navigation at all. The potential also exists to coordinate low water level periods with dredging. In each pool, certain spots in the mid or upper pools tend to develop the shallowest water and determine the capacity to maintain a nine foot channel. By dredging these spots to a greater depth shortly before lowering of water levels, impacts on navigation can in some cases be avoided or minimized.

Actions:

1) Lower water levels on Pool 5.

Recent studies indicate that water levels in Weaver Bottoms could be lowered by three feet or more for 30 consecutive days, on average, once every three years between May and August, and by two feet or more 30 consecutive days for roughly two thirds of all years (C J Woltemade 1995 Water Level Management Opportunities for Ecological Benefit Pool 5 Upper Mississippi River) Three foot lowerings would expose sediments over one third of the total Weaver Bottoms area (or approximately 1,274 acres) and should decrease water levels in enough of the remainder of Weaver Bottoms to provide a vegetative response. Two foot lowerings would expose roughly one sixth or 574 acres. Within the pool, problem dredge sites occur adjacent to the Bottoms, and when dredged, are dredged to approximately twelve feet. If dredging is coordinated with water level reductions in Pool 5, a nine foot navigation channel could be permanently maintained.

Although a three foot reduction would leave a nine foot channel, this reduction might impede optimal barge weight. The exact timing of any lowering also cannot be predicted with certainty because it would depend on low water flows, which in turn depend on rainfall and the amount of waters in soils. A combination of occasional major water lowerings that affect navigation and minor lowerings that do not affect navigation could sufficiently restore natural river processes Lowering of water levels must also be coordinated for other potential impacts on marinas, houseboats, and other river users, and should always be preceded by substantial public education

2) Conduct a system-wide study of water level management by 1998.

The Corps of Engineers should lead a team of public and private partners, in coordination with navigation and other river interests, to conduct a two-year, systemwide study of the Upper Mississippi River to determine how to restore more natural water patterns in each of the river's pools. This effort should include field tests of vegetative responses to different water level reductions

B. Tributary Restoration

Natural rivers build deltas and recarve channels. Recarving primarily occurs during occasional large floods which multiply the energy of the water. Unlike the main channel -- which has been physically altered to maintain a nine-foot channel -- few of the Upper Mississippi's tributaries support navigation. Those tributaries once moved dynamically across the floodplain carrying out in miniature what the Mississippi carried out on a grand scale -- carving new channels, creating new marsh deltas Connected to the river, these tributaries created backwater habitats of great value to river fish. Most of these tributaries have now been channelized as they enter the floodplain Unchannelizing tributaries provides one of the greatest opportunities for recreating dynamic river forces and dynamic fish habitats because doing so would not interfere with navigation. In fact, tributary restoration would trap sediment in the floodplain and reduce dredging costs

Restoring tributaries in the floodplain also provides a mechanism for redressing declines in floodplain forests and connected uplands and wet meadows. Oak forests, persimmon, hickories and pecans -- critical habitat for wildlife, including songbirds -- are declining throughout the river's floodplains. Restoring tributaries also provides the potential to permit fish to pass around locks and dams that now block passage. Many native fish and mussels migrated in the original river -- the skipjack herring and the American eel migrated from the Gulf of Mexico. The ebony mussel, which attaches to the herring, has lost its capacity to move and is declining rapidly. Paddlefish, and other river species, migrate long distances in search of suitable habitat. These migrations have been greatly curtailed by dams, which block migration completely when gates are in the water, and which allow migration only when high flood flows impede efforts to move upstream. Many tributaries originally had channels, or side-channel connections from the Mississippi, which, if restored, would recreate extensive opportunities for fish to move upstream and around dams through tributary side channels.

Action: Begin a tributary restoration project in each state by 1998.

Each state, in cooperation with public and private partners, should lead a team to begin to implement by 1998 one major tributary restoration project. Existing easement and acquisition programs should be targeted to tributary restoration, and high priority should be placed on retiring agricultural lands offered by willing sellers that contribute to such projects. River communities should be involved in planning any restoration project.

Restoring the Vermillion River below Hastings, Minnesota, for example, might assist fish passage around Lock and Dam 3. Restoring the Spoon River where it passes through the Illinois River floodplain would substantially reduce the amount of sediment entering the system and reduce dredging costs.

C. Floodplain Restoration

Linkages between the river and its floodplain are critical to maintaining the long-term biological health of the Upper Mississippi River. Most of the plants and animals inhabiting the Upper Mississippi River floodplain have adapted to the river's flood pulse: the annual advance and retreat of floodwaters onto the floodplain. During periods of highwater, fish and wildlife migrate out of the channel and onto the floodplain to use newly available habitat and resources. As floodwaters recede, nutrients and organic matter from the floodplain are transported into the river. By occupying large areas of bottomlands, the original Mississippi River ensured that some portion of the floodplain would meet the habitat requirements for a wide variety of species during high flow periods.

In addition to providing fish and wildlife access to seasonally-inundated spawning and nursery habitat, these river-floodplain interactions also trigger the biological and chemical transformations that make food available higher up the food chain. Like all river systems, energy flows from primary producers (plants) through an invertebrate consumer community to species consumed and enjoyed by humans (fish and waterfowl). When floodwaters inundate floodplain habitats, energy stored in floodplain plants is released to the aquatic environment. The boundary that separates land and water, known as the river-floodplain aquatic terrestrial zone or moving littoral zone, is where most of these important energy transfers occur.

Large remnants of the Upper Mississippi's original floodplain remain above the Quad Cities and support large, diverse fish and wildlife populations. But, elevated water tables associated with impoundment have had a devastating impact on floodplain forests. By increasing the elevation of floodplain groundwater levels, the navigation dams have increased the elevation and duration of saturated soil conditions throughout much of the remaining emergent floodplain and reduced the available rooting depth for trees and other vegetation. Increased wind fetch in the impounded areas of the navigation pools, coupled with the shallow rooting depth, has made floodplain trees vulnerable to wind throw. Targetted floodplain land needs be acquired in this reach in order to reestablish these disappearing floodplain forests.

Between the Quad Cities and St. Louis, the river retains far less access to its floodplain. And, below St. Louis, most river-floodplain interactions have been eliminated. In these areas, the conversion of floodplain habitat to agriculture has had a far more dramatic effect on fish and wildlife populations, causing severe population declines. Waterfowl populations, in particular, have been reduced by the loss of critical habitat and feeding opportunities along the Mississippi River migration corridor. The concentration of waterfowl into few remaining habitats has made waterfowl more susceptible to disease.

The anticipated growth of navigation traffic increases the need for floodplain restoration. Floodplain development continues in many urban areas, including St. Paul, for example, where a long-term commitment to floodplain parks and open space may be reversed by a proposed metal shedding operation. As navigation traffic increases, additional terminals and other facilities will continue to be constructed on the floodplain, exacerbating the fragmentation of existing habitat. Urban sprawl also threatens the river's Blufflands, as new developments spread from the Twin Cities, Cedar Rapids and the Quad Cities. In addition to destroying large, continuous tracts of woodlands, navigation-induced development reduces the scenic values of the river.

Actions:

1) Begin one major floodplain restoration project in each state by 1998.

Restoring a small fraction of lost floodplain habitat will substantially aid the long-term productivity of the Upper Mississippi River system. Each state should lead a team of public and private partners to begin a floodplain restoration project in each state by 1998. State and federal acquisition and easement agencies should seize opportunities to acquire easements and fee title on floodplain lands that could be reconnected to the mainstem river. Lands that can be reconnected to the river should be given the highest priority.

For example, state and federal agencies should restore the confluence of the Mississippi and Missouri rivers. In addition to providing urban spaces for recreation and wildlife, this region has been identified by experts on neotropical migrants as critical bird habitat. The creation of Emiquon National Wildlife refuge would also restore floodplain functions. This proposed 11,000-acre national wildlife refuge will restore the once vast marshes, bottomland forests and backwater lakes that converted the floodplain at the confluence of the Illinois and Spoon Rivers near Havana, Illinois. Most of the land has been drained, leveed, cleared and converted to intensive row-crop agriculture. Like the confluence project, this project will illustrate the benefits of river-floodplain connections, restore lost fish and wildlife habitat and protect backwater lakes from sedimentation. In addition, restored wetlands will store floodwaters, convey flood flows away from the upstream town of Liverpool, and capture sediment from the Spoon River that would otherwise contribute to backwater accretion.

2) Promote alternative agricultural uses of the floodplain.

Each state department of agriculture should lead a team of public and private partners to encourage alternative uses of floodplain lands. Floodplain restoration need not always mean the complete dedication of floodplain land to conservation purposes. Occasionally flooded farmland can provide fish spawning and migratory bird habitat and many of the hydrologic functions of land that is held in public ownership for conservation purposes. Preserving land in farm uses may also be less expensive in some cases than complete acquisition and more acceptable to land owners. A variety of alternative agricultural practices have the potential to produce substantial economic returns and could be developed further: production of switchgrass or fast-growing trees for biomass, intensive rotational grazing, and dry season row cropping.

D. Create Diversity of Water Depths

Whether river forces, now used only to maintain a channel for navigation, can be used to simultaneously meet the needs of navigation and to create and maintain backwater channels and deepwater pools is among the most difficult questions facing resource managers.

The wing dikes, revetments and closing dams that help make navigation possible have disrupted many of the processes by which the Mississippi created a wide diversity of habitats Prior to the construction of the navigation system, fluvial processes produced frequent changes in the geometry of the Mississippi's channels and floodplains. Wing dams, closing dams, revetments, levees and navigation dams have concentrated river flow in the main channel, prevented channel meandering, and reduced bathymetric diversity. The placement of these structures has been described by natural resource managers as the single largest "geological event" since the end of the last glacial period. While existing habitat is being lost due to sedimentation and river regulation, these structures prevent the river from creating new aquatic habitat.

The loss of water depth (bathymetric) diversity occurs in both the lower and upper portions of each pool. In the lower pools, islands have rapidly eroded, and with them, critical lower water litorral zones on their downstream side and critical upland habitats where many species can escape predation. At the same time, deep areas within those pools have filled in, limiting habitat for many fish that rely on those areas. Of greater concern, upper pools that have maintained the most productive and diverse fish and wildlife populations are also slowly filling in. Channels that once provided a range of water depths are smoothing out into once common depth, limiting their habitat value at different seasons and for different species. Closing structures that limit flow into these side channels have blocked the creation of new habitat, as has the limitation of flow at the dam into defined spillways.

Wingdams necessary to maintain a narrow channel inherently limit the capacity to restore a more naturally wandering river, but most of the carving force provided by the river occurs during floods when it might be possible to divert excess water from the main channel. Where and how reopening of channels might be effective has not been studied.

Because the potential to restore natural river forces in the deep lower pools is even more limited, those areas justify greater human manipulation to serve ecological and recreational needs. At least three concepts should be explored: the use of different weir structures to carve deeper habitats off of the main channel, the manipulation of water levels within leveed areas, and the inexpensive construction of small islands. In the interim, there are other opportunities to improve habitat in the main channel. One is the potential to improve habitat along the river banks between wingdams. Over time, sediment has accumulated between dikes, causing rapid river bed

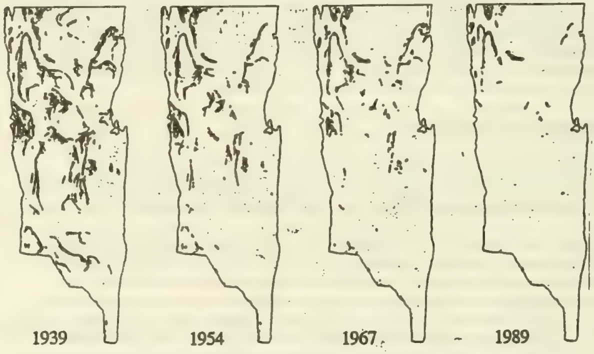


Figure 3. Loss of islands in the downstream half of Navigation Pool No. 8, upper Mississippi River from 1939–1989

aggradation and the conversion of riverine habitat into upland habitat, most severely reducing the habitat value of these structures below St. Louis. Possible alterations include making notches within the wingdams to allow flow through to create more complex habitat below wingdams. Other techniques have included placing rip-rap several feet from the eroding bank. The Corps may have alternatives to side-channel closing dams. One alternative is the chevron dike, V-shaped structures placed in a staggered arrangement that maintain channel maintenance objectives without closing off secondary channels.

Actions:

1) Modify wingdams and closing structures to improve habitat.

The Corps should lead a team of public and private partners to develop a plan with implementation schedules for modifying wingdams, channel closing structures and rip-rap to improve habitat. Although channel training structures like wing dikes have eliminated the river's ability to create new habitat, areas along the banks from dike to dike provide much of the river's low current velocity and structurally complex habitat between St. Louis and Cairo, and attract or support large numbers of fish and invertebrates. Although the environmental costs and benefits of these structures have not been fully evaluated, studies suggest that organic materials trapped in dike-created eddies may help support local invertebrate and fish populations.

2) Develop and demonstrate technologies to recreate and maintain backwater and diverse water depths by 1998.

The Corps should lead a team of public and private partners to investigate techniques for restoring natural river forces to recreate bathymetric diversity.

II. Minimize Navigation Impacts

A. Dredged Material Placement

Despite the negative environmental impacts of dredged material placement on floodplain forests and riverine habitat, the Corps of Engineers has no consistent policy regarding dredge disposal practices. Indeed, the Upper Mississippi River is plagued by a hodge-podge of practices -- including open water disposal -- that have evolved in response to the presence or absence of political pressure and, consequently, vary widely from district to district.

The St. Paul District has developed the most comprehensive and collaborative approach to dredge spoil disposal. While ultimate control remains with the District Engineer, a consultative group consisting of the Corps, the U.S. Fish and Wildlife Service, the Coast Guard and the Minnesota, Wisconsin and Iowa departments of natural resources is actively engaged in spoil disposal planning. Pool by pool plans have either been completed or underway, ultimately creating a channel maintenance plan for the entire district. This plan is designed to anticipate dredging and dredge spoil requirements until the year 2035, and will allow the Corps to acquire needed disposal sites, arrange for more flexible equipment, remove spoil from the floodplain and identify beneficial uses.

Neither the Rock Island or St. Louis districts has developed a long-term system for dredge spoil disposal. The planning and consultative process in the Rock Island district is primitive when compared to Saint Paul -- there is no long-term channel maintenance plan and, in the last 15 years, the district has prepared a handful of site plans that comprise less than 10% of the routinely worked dredging sites. Resource managers from other agencies visit sites shortly before the dredge arrives to identify the least destructive deposit near the dredge cut. Because the Iowa DNR has retained its right under Sections 404(t) and 401 of the Clean Water Act to permit and certify spoil sites on a case by case basis in Iowa, dredge disposal heavily impacts floodplain resources in Illinois, where the state EPA has abdicated this responsibility and has issued blanket permits and certifications.

The St. Louis district has the most primitive dredge disposal practices. Representatives of other agencies are given a two-day boat tour of the region to survey pools and the open river. In addition to no long-term channel maintenance planning, there are no individual site visits and no ongoing dialogue between the Corps and other resource managers. Although the Corps does occasionally release hydrographic survey plots of the areas under consideration, these documents are frequently distributed after dredging has been completed. Like their planning procedures, the St. Louis District's dredging and dredge spoil placement practices are equally primitive. There is increasing reliance on dustpan dredges, machines that spew spoil into the open water immediately adjacent to the cut, increasing turbidity and smothering mussel beds and other benthic habitat.

Actions:

1) Adopt the St. Paul Standards.

All three Upper Mississippi River Corps of Engineers districts should develop long-term plans for channel maintenance, identifying disposal sites and potential beneficial uses well in advance to reduce the environmental impacts of dredged material placement. The Rock Island and St Louis districts should develop a formal, ongoing relationship with other state and federal river managers to develop long-term comprehensive plans for each pool. All three districts should open their processes to public participation.

2) Use Operations and Maintenance funds to Acquire Dredge Spoil Sites.

The Corps should use Operation and Maintenance funds to acquire sites for dredged disposal and to improve dredge spoil deposition practices. Uniform standards for all three districts for site selection and disposal practices should be developed based on scientific needs rather than state permitting requirements, and the use of dustpan dredges should be eliminated by 1998. States should be granted the power to veto site disposal decisions.

B. Wake effects

Commercial towboats and barges generate hydraulic effects including currents, drawdown and wake waves. These hydraulic effects can resuspend sediments, displace and disturb aquatic life, and contribute to the loss of backwater habitat. Wake waves from recreational boats also cause bank erosion, resuspend sediment, and disturb fish and wildlife.

Although the magnitude of impact varies in relation to the size and speed of the vessel, the direction traveled, the size and shape of the channel, the composition of the river bed, and the location of the vessel within the channel, vessel passage produces a predictable sequence of events. As a vessel moves through the channel it creates currents that move at a right angle to the direction of travel. A second effect is created by vessel movement past a point: water is first squeezed out from under the vessel and then returns to the "hole" made by the vessel as its moves forward.

Although this surge or "drawdown" may last for only a moment, the water movement may resuspend sediments and displace organisms from preferred habitats. In addition, this surge can also cause water to move out of the main channel and into backwater areas, transporting sediments. As a vessel moves into and out of backwater areas, turbulence and wave action further suspend sediment, blocking the light and compacted soils that aquatic plants need for growth. Additional turbulence and wave action can be created by the propulsion system. Another problem results when sediments contaminated with toxic materials are resuspended in the water column, consumed, and transported to higher life forms, including humans.

Levels of river traffic obviously increase the impacts of wake effects. Although the Corps is studying the impacts of wake effects in the Upper Mississippi River-Illinois Waterway Navigation Study, levels of future traffic are difficult to predict. While some economists have forecast a doubling in grain shipments, others suggest that grain shipments may not increase so greatly, and still others suggest that changes in agricultural technology overseas and foreign policy make such predictions impossible. Additionally, domestic uses of grain will influence shipments on the Upper Mississippi River. Technology advances in such areas as alternative fuels, food products and plastics may change market destinations. If river users are required to share the cost of maintaining the inland water system, demand for navigation might be affected.

Actions:

Although the Corps of Engineers is constructing a physical model at the Waterways Experiment Station as part of the Upper Mississippi River-Illinois Waterway Navigation Study to assess the impacts of vessel passage on bank erosion, fish, plants, backwaters, and mussels, there are steps federal resource managers can take before 1999 to reduce the impacts of wake effects.

1) Install Mooring Buoys and Identify No-Passing Zones.

Mooring buoys should be used at critical locations near and around lock systems, where tows are forced to wait to lock through, to significantly reduce erosion and wake effects. Federal and state transportation officials should work with the navigation industry to determine the best position for the buoys, and intentional barge groundings should be reduced and limited to areas where environmental impacts would be insignificant.

Areas that are environmentally sensitive or prone to impacts of vessel passage should be no-passing zones, so that tows overtaking or passing other tows would be able to maintain an environmentally adequate distance from areas prone to impact from vessel passage. These areas, identified by federal and state resource managers, should be clearly identified on navigation charts and on-site.

2) Identify and avoid resuspension of contaminated sediments.

Concentrations of sediments contaminated with toxic materials, also known as "hot spots," are well known to river scientists. Unacceptable levels of PCBs, for example, have been found in Lake Pepin, in Pool 15 near Davenport, below St. Louis, and in stretches of the Illinois River. These toxic materials are often resuspended in the water column and enter the food chain, making some river fish unsafe for human consumption. The Coast Guard should lead a team of public and private partners to identify and avoid the resuspension of contaminated sediments.

3) Consider the use of inexpensive artificial islands to reduce wake effects.

In addition to restoring lost nesting habitat for migratory waterfowl, the construction of artificial islands near areas prone to impacts from vessel passage may significantly reduce bank erosion and the sedimentation of backwaters. Wind and wave action in the impounded portions of the navigation pools have eroded away many of the river's islands, and continuous inundation has discouraged the formation of new islands. As islands have eroded and disappeared, wind fetch and wave energy have increased the resuspension of sediments. This increased turbidity and wave action have, in turn contributed to the decline of aquatic vegetation and the loss of predator-free nesting sites for waterfowl. The Corps of Engineers should research the costs and benefits of using artificial islands to reduce wake effects.

4) Forecast future river traffic.

Predicting future river traffic will help resource managers predict and mitigate future environmental impacts. The Water Science and Transportation Board of the National Research Council, in collaboration with public and private partners, should lead a review of navigation traffic forecasts. This study should be completed prior to the navigation study to better guide agency decision-making.

C. Exotic Species

Before the development of canals connecting the Mississippi River's tributaries with Lake Michigan, a drainage divide separated the Mississippi River Basin from the Great Lakes-St

Lawrence River Basin at Chicago. This divide provided a natural protective barrier between the two watersheds which prevented the flow of non-native aquatic organisms from one to the other. Once water development projects breached the natural barrier, this movement of materials became possible and a new threat to the Mississippi River ecosystem was introduced in the form of a transportation route that allows non-native species from the Great Lakes into the River. This waterway appeared at the same time that both the Mississippi and the Great Lakes became important transportation systems and hosts to barges that can deliver species around the world in their ballast water.

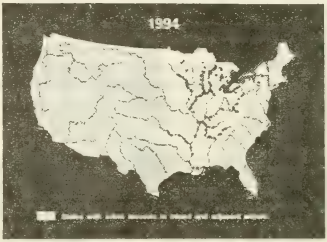
After the construction of the Chicago Sanitary and Ship Canal, which connected the south branch of the Chicago River to the Des Plaines River in 1900, the flow of Lake Michigan water into the Mississippi drainage increased dramatically. The canal connected Lake Michigan and the Chicago River, to the Desk Plaines River, which in turn flows into the Illinois River and from there into the Mississippi.

The zebra mussel, the most famous recent interbasin traveler, moved from southern Lake Michigan into the Illinois River in 1991 and is currently found throughout the entire Mississippi and its major tributaries. The zebra mussel has had both an economic and environmental impact on the Mississippi river basin. In addition to increasing operating costs of river infrastructure, the mussel threatens the future survival of the 297 freshwater mussel species in the Mississippi and its tributaries because it can attach to and overgrow any solid material including the shells of other mollusks. The diversity of mussel species in the River now threatened is unparalleled. Rivers in Europe contain only 15 freshwater mussel species.

Introduced species bring additional problems to the Mississippi river ecosystem including new diseases and parasites that effect both aquatic organisms and humans. The Chinese mitten crab (Eriocheir sinensis), for example, is an intermediate host for the Oriental lung fluke (Paragonimus westermanii), which attacks humans. The mitten crab has invaded Lake Erie and the Pacific Northwest. The fluke was recently discovered in the mitten crabs in the Northwest, and it may be only a matter of time before it appears in the crabs in the Great Lakes. Several other nonindigenous species, including the round goby, are now poised in southern Lake Michigan and the Chicago waterways, ready to enter the Mississippi drainage, if they have not already. Species in the Mississippi that threaten the Great Lakes include the silver, black, and bighead carp (all from Asia); the white bass (a species native to the Illinois River), the striped bass (a large predator introduced from the Atlantic coastal rivers of the U.S.), and hybrids of the two, the dark falsemussel (Mytilopsis leucophaeata); and a zooplankter (Daphnia lumholtzi). D. lumholtzi is native to Africa, India, and Australia, but was found a few months ago in the Illinois River, just 100 miles downstream from Chicago. D. lumholtzi is armed with defensive spines that make it difficult for native fish to eat, and it may displace the native, palatable zooplankters that are the primary food source of larval sport fish.

Actions:

1) Construct a dispersal barrier at Chicago.



A dispersal barrier at Chicago could help protect the Mississippi and the Great Lakes from each other's introduced pests. Although no dispersal barrier is perfect, the rate of interbasin transfers could certainly be reduced, if not halted, buying time for investigation of possible control techniques. In addition, the dispersal barrier might reduce populations of some existing aquatic pests below nuisance levels, if such populations are maintained by immigration. Zebra mussel populations in the Illinois River are discrete and appear to be sustained by drift of larvae from upstream populations, possibly including populations in the Chicago waterways and southern Lake Michigan. If the drift of larvae were drastically reduced by a dispersal barrier, the population sustained by this drift (presumably somewhere in the upper Illinois River) would die back after 4-5 years, the normal lifespan of the mussel. Neither adults nor larvae can move upstream on their own. Once the population in the upper Illinois River died back, the supply of larvae to the next population downstream would diminish, and that population would die back, if there were no other large populations in upstream tributaries. An upstream dispersal barrier could cause a downstream cascade of die backs, that might drastically reduce zebra mussels in the entire Illinois River. This technique of cutting off the supply of larvae at the head of a flowing system might be transferred to other river systems, and to other links between basins.

A dispersal barrier would help protect the water transportation system and waste dilution system (where clean Lake Michigan water is used to prevent stagnation and low oxygen levels in the Chicago waterways) from a panic response to a newly-introduced pest or disease. A disease (such as a virulent, drug-resistant form of cholera) or vector that threatened public health or sport fisheries could result in public demands for immediate, and permanent closure of the Chicago "gateway" to invasion.

2) Retrofit Upper Mississippi and Illinois River Locks.

The Corps should lead a team of public and private partners to consider lock modifications that could prevent the spread of exotic species. This study should be timed to coincide with the Upper Mississippi River-Illinois Waterway Navigation study so that decision-makers could identify opportunities to simultaneously address future navigation needs and potential lock modifications that could restrict the movement of such nuisance species.

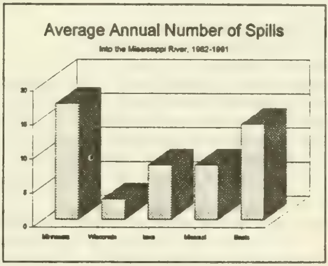
3) Develop ballast water control technologies.

Ocean-going commercial vessels have an impact on the Mississippi by introducing nonindigenous species. Ocean-going vessels should be encouraged to discharge ballast water at sea rather than in U.S. ports, and federal agencies should develop new technologies to allow ballast water exchanges at sea rather than in U.S. ports.

D. Spill Control

Although there has never been a catastrophic spill on the Upper Mississippi River, river traffic is expected to grow substantially and the risk of such spills will only increase.

Single-hull tank vessels under 5,000 gross tons will not be eliminated from the Mississippi until the year 2015. While any single spill would be small in volume when compared to the Exxon Valdez disaster, a catastrophic spill on the Upper Mississippi River would disperse quickly, eliminating the ability of river managers to contain hazardous materials before the contamination of habitat and water supplies. Although the impacts of such a spill would reduce the productivity of aquatic and terrestrial habitat for decades, few steps have been taken to mitigate for the impacts of such a disaster.



Actions:

1) Eliminate the Movement of Hazardous Cargo in Single-Hulled Barges by 2000.

The movement of hazardous cargo in single-hulled barges represents one of the clearest threats to the Upper Mississippi River. Although using double-hulled barges will be more costly, the long-term costs of a catastrophic spill far outweigh the short-term impacts of the navigation industry. Summit participants should support state legislative initiatives to protect the Upper Mississippi River from such spills. During the transition from single hulled to double hulled barges for hazardous cargo, steps should be taken by the navigation industry to minimize the potential for spills, including the light loading of single hulled barges and placing barges in the center of barge tows.

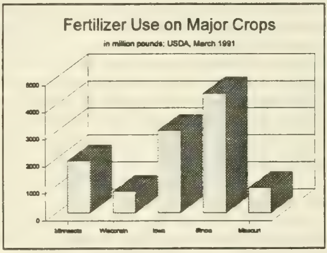
2) Toughen Penalties for Illegal Dumping

While illegal dumping is confined to a few irresponsible actors, efforts by the navigation industry have been insufficient. Towboat operators who tolerate such behavior should have their operating licenses suspended or permanently revoked, depending on the seriousness of the offense, and rewards should be offered to witnesses who can document deliberate dumping.

III. No Net Increase by 2010

Sediments enter the Mississippi River at a rate that exceeds the river's ability to move sediment downstream. As a result, sediment is filling backwaters, blocking light penetration needed by plants, burying mussel beds, filling deeper pools, and increasing dredging costs. Much of this sediment is the result of historic farm practices, which have left large sediment deposits in small streams. But agricultural practices today continue to contribute excessive sediments as well.

Some of the major sediment sources are well known. Due to topography and soil type, rivers and streams in southeastern Minnesota, southwestern Wisconsin and northeastern Iowa contribute substantially more sediment than the river can transport. The Minnesota River, which contributes only one-third of the combined flow of the Mississippi and Minnesota at their confluence, carries six times as much sediment as the Mississippi at that juncture. The Chippewa, Wisconsin, and Black rivers in Wisconsin together contribute nearly 2 million tons of sediment to the Upper Mississippi each year. As many as half of the Mississippi's backwaters may be filled in with these sediments by the year 2035. Nutrients found in fertilizers such as phosphorous and nitrogen also attach to these sediments and contribute to low levels of dissolved oxygen.



Some of the practices that would reduce sedimentation could also help reduce flood losses, improve water quality and increase habitat for fish and wildlife. Many of the same tributaries that are large sediment sources have also been identified as watersheds where non-structural flood control alternatives show the greatest promise Conversion of forests, prairies and wetlands to row crop agriculture, roadways and urban areas has decreased the infiltration of runoff, resulting in increased overland runoff. The loss of wetlands (Iowa, Illinois and Missouri have lost 85 percent or more of their wetlands) and upland cover, and the modification of the landscape throughout the basin over the last century, has significantly increased runoff. Upland watershed treatment and the restoration of upland and bottomland wetlands can reduce flood stages during smaller but more frequent floods, reduce sedimentation and improve water quality. Many farmers have already adopted land management practice designed to meet these goals.

Many of the same measures that can be taken to reduce overland runoff and soil erosion also improve water quality. Although the most visible sources of pollution into the Upper Mississippi River have been substantially reduced since 1972, overland run-off from farms and city streets continues to prevent large portions of the Upper Mississippi River from meeting their designated uses. Nearly half of the rivers and streams in the Upper Mississippi River basin fail to fully support their designated uses due primarily to contaminated runoff. More than two-thirds of the Upper Mississippi River is not clean enough to support fish consumption or swimming.

Runoff of farm chemicals, such as herbicides and pesticides, is a major concern in the Upper Mississippi River system. During heavy rains, these agricultural chemicals reach concentrations that often exceed safe contaminant levels. Other source of pollution include livestock operations, which apply unsafe levels of manure to adjacent fields and insufficiently maintain outdated lagoons; point sources, including direct discharges of toxic chemicals; and outdated septic system and municipal treatment plants that release unsafe levels of bacteria. High levels of PCBs and toxic metals are found in river sediments and in the tissues of river fish throughout the Upper Mississippi River.

Actions:

1) No net increase in sediment by 2010.

Many farmers have reduced erosion through conservation compliance and other state and federal erosion control programs, but sediment reduction goals are generally established on a farm-by-farm basis. Watersheds that contribute the greatest amounts of sediment do not receive the resources necessary to reach a long-term level of equilibrium between the rate at which sediment is entering and leaving the Upper Mississippi River. States that have identified "priority watersheds" also focus on local rather than regional erosion control objectives.

Each state Department of Agriculture should create a team of public and private partners to develop a long-term plan to reduce the rate of sediment entering the Upper Mississippi River so that it is equal to the rate at which sediment is leaving the Upper Mississippi River by the year 2010. Changing the operation and design of navigation infrastructure will help improve the rate at which sediment is moved through the mainstem system and should also be investigated. To help the five states meet this goal, the U.S. Environmental Protection Agency and the U.S. Geological Survey should establish and maintain a basinwide network of monitoring stations. In addition, the USGS should estimate current and future sediment budgets for Upper Mississippi River tributaries.

2) Fishable and Swimmable by 2010

Although states have addressed the most visible sources of pollution, large sections of the Upper Mississippi River fail to meet standards for fishing and swimming set in the Clean Water Act. States have set different standards for pollution levels, complicating clean-up efforts. The framers of the Clean Water Act explicitly recognized the need for state water quality programs to address land-based sources of pollution, and Congress amended the Act in 1987 to create a state non-point source management program. However, this program has suffered from lack of focus, funding and enforceable mechanisms. The governors of Missouri, Illinois, Wisconsin and Minnesota should pledge to make the Upper Mississippi River fishable and swimmable by 2010. Each state should lead a team of public and private partners to use all available tools to develop and implement strategies to meet this goal.

3) Demonstrate urban runoff control in the Twin Cities.

Urban runoff is increasingly recognized as a major source of pollution. Federal and state officials should provide technical and financial assistance to communities to help them develop a model for urban runoff controls applicable to other river cities. Minneapolis and St. Paul public works officials are currently working with neighborhood groups, local businesses, and environmental groups to raise awareness of non-point sources of pollution. This model partnership is targeting neighborhoods that drain to the Mississippi to assess awareness of non-point source issues to design educational materials, and to guide implementation of runoff reduction efforts.

4) Federal Partners should identify major sources of sediment and non-point source pollution.

Federal and state agencies should work cooperatively to: 1) quantify the sediment flows of each tributary; determine the rate of inflow and outflow of sediment for each pool, and determine the level of sediment reduction necessary to achieve no net increase; 2) identify rivers and streams where erosion control measures also reduce flood losses and improve water quality; and 3) identify and target priority watersheds. The U.S. Environmental Protection Agency should establish a watershed management technical assistance center in LaCrosse to support public and private efforts to implement watershed-based strategies designed to reduce erosion, flood losses and non-point source pollution.

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Mr. FRELINGHUYSEN. Thank you, Mr. Faber. You didn't miss a beat. You went right through about three of those pages in one breath. Congratulations.

I believe the staff here might benefit, if possible, having a copy of your testimony.

Mr. FABER. Certainly.

Mr. FRELINGHUYSEN. Thank you very much. Very articulate testimony

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WEDNESDAY, FEBRUARY 28, 1996.

NEW YORK AND NEW JERSEY PORT ISSUES

WITNESSES

LILLIAN C. BORRONE, DIRECTOR, PORT COMMERCE DEPARTMENT, PORT AUTHORITY OF NEW YORK AND NEW JERSEY

JOSEPH T. GROSSI, EXECUTIVE DIRECTOR, MARITIME ADVISORY COUNCIL OF NEW JERSEY, NEW JERSEY DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT

Mr. FRELINGHUYSEN. The Chair is pleased to recognize representatives of the Port of the New York and New Jersey, in particularly Lillian C. Borrone. Lillian, how are you? Nice to see you.

Ms. BORRONE. Thank you.

Mr. FRELINGHUYSEN. Do you have some company with you or are you here solo?

Ms. BORRONE. No, I am here with Mr. Grossi.

Mr. FRELINGHUYSEN. Mr. Grossi, how are you? Nice to see you again.

Thank you, both of you, for being here. Mr. Grossi is the Executive Director of the Maritime Advisory Council of the New Jersey Department of Commerce and Economic Development.

Ms. BORRONE. It is our pleasure, Mr. Chairman. We regret at the last moment that Richard Weighart, who is Vice President of Transportation for the New York City Economic Development and Commerce was unable to join us. We would like to submit our full statement for the record.

Mr. FRELINGHUYSEN. Consider it accepted.

Ms. BORRONE. Thank you. I would like to take a moment to observe that this is the last time that our panel will have the privilege to testify before former Chairman Bevill and, of course, Mr. Myers.

We want to thank you, sir, because you have always been very helpful and very supportive of our port and we have appreciated it.

Mr. BEVILL. Thank you. I have enjoyed working with you and I am sure you are going to move right along.

Ms. BORRONE. Well, we are going to try our best, sir.

Although the Federal budget recommendations are not available, the sums we ask for are what we believe are necessary to continue and advance existing construction and maintenance navigation projects and provide for much needed studies to continue the work in our harbor.

This proposal that we are making today will, we believe, continue our ongoing partnership with the Corps of Engineers. We are recommending, Mr. Chairman, an appropriation of $39,650,000 in Federal funds for fiscal year 1997. Those funds would be allocated among construction, studies and operation and maintenance of the Federal navigation projects. The details of those projects are included in our full statement.

Last year, the North Atlantic Division Commander General, Milton Hunter, and members of our congressional delegation, advised this subcommittee of the severe problems we are experiencing in the management of dredge materials in our harbor, management of dredge materials including the sediment dredged from terminal berths because of lack of adequate disposal facilities.

Mr. Chairman, I know that you are aware that the Port of New York and New Jersey is in a crisis that is starting to take its toll because among other things, the lack of maintenance dredging by the Corps of Engineers of the Federal channels serving commercial interests. The Corps has made presentations that list Federal channels in Arthur Kill in New York and New Jersey, Bay Ridge in New York, Hackensack River in New Jersey, Hudson River in New York and New Jersey, Eastchester Creek, New York, and Portchester Harbor in New York as having approximately 3 million cubic yards of shoaled contaminated sediments that need to be dredged. These projects have been deferred, deferred because of a lack of available disposal facilities that can accept sediments that are not able to go to the ocean disposal site.

Yes, the States of New York and New Jersey are working together with the Port Authority and the city of New York, and with business and environmental interests, to develop a solution, a plan of action. Key to any solution is the readiness of the Federal Government to fully participate in not only the planning of construction, but the actual construction of alternate disposal facilities.

We listened this morning to Mr. Lancaster testify on water resource legislation, and I was pleased to hear him say that the Corps is prepared to participate in cost sharing. It is our fervent hope that you will clearly direct the Corps of Engineers to participate in the construction of confined disposal facilities in ports where Federal and local dredging projects require them.

Now, I would like to turn the microphone over to Mr. Grossi.

Mr. FRELINGHUYSEN. You can be sure we will.

[The joint statement of Ms. Borrone, Mr. Grossi and Mr. Wieghart follow:]

JOINT STATEMENT
LILLIAN C. BORRONE, DIRECTOR, PORT COMMERCE DEPARTMENT
THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY
AND
JOSEPH T. GROSSI, EXECUTIVE DIRECTOR
MARITIME ADVISORY COUNCIL OF NEW JERSEY
NEW JERSEY DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT
AND
BRIDGET WIEGHART
VICE PRESIDENT FOR TRANSPORTATION
NEW YORK CITY ECONOMIC DEVELOPMENT CORPORATION

REGARDING APPROPRIATIONS IN FISCAL YEAR 1997
FOR FEDERAL CHANNEL & RELATED DEVELOPMENT IN THE PORT OF NEW YORK & NEW JERSEY

PRESENTED TO THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
HOUSE COMMITTEE ON APPROPRIATIONS
CONGRESS OF THE UNITED STATES

WASHINGTON, D.C.
FEBRUARY 28, 1996

American Waterways Operators
Bayonne Chamber of Commerce (NJ)
Board of Commissioners of Pilotage of the State of New Jersey
Brooklyn Chamber of Commerce (NY)
Chamber of Commerce of the Borough of Queens (NY)
City of Jersey City, Division of City Planning, Department of Housing and Economic Development
City of Newark, Department of Engineering (NJ)
Commerce and Industry Association of New Jersey
Hudson County Central Labor Council
Hudson County Chamber of Commerce and Industry (NJ)
International Longshoremen's Association
Local 25 - International Union of Operating Engineers
Local 333 - United Marine Division
Maritime Advisory Council of New Jersey
Maritime Association of the Port of New York and New Jersey
Maritime Port Council of Greater New York and Vicinity
New Jersey Alliance for Action
New Jersey State AFLCIO
New Jersey State Chamber of Commerce
New York City Partnership and Chamber of Commerce, Inc.
New York-New Jersey Port Promotion Association
New York Shipping Association, Inc.
New York State AFLCIO
Regional Business Partnership, The Chamber of Commerce for the Metro Newark Region (NJ)
Save Our Port
Seafarers International Union
Staten Island Chamber of Commerce (NY)
Union Country Alliance (NJ)
Union County Economic Development Corporation (NJ)
United New Jersey Sandy Hook Pilots Benevolent Association
United New York Sandy Hook Pilots Benevolent Association

I am Lillian C. Borrone, Director, Port Commerce Department of The Port Authority of New York and New Jersey. Joining me are Joseph T. Grossi, Executive Director, New Jersey Department of Commerce and Economic Development's Maritime Advisory Council, and Bridget Wieghart, Vice President for Transportation, New York City Economic Development Corporation. On behalf of the civic, trade, labor and governmental interests listed on the cover of our statement, we request that sufficient federal funds be appropriated in Fiscal 1997 for the design, construction and maintenance of essential navigation projects in the Port of New York and New Jersey under the U.S. Army Corps of Engineers' Civil Works program. We thank you, Mr. Chairman, and members of the subcommittee for affording us time to make our funding needs known to you.

I would like to take a moment to observe that this is the last time our port panel will have the privilege to appear before Chairman Myers and former Chairman Bevill. Over the years both of you have been gracious and very helpful to our port community. We have had the honor of your presence at the port and have greatly appreciated the interest and fair mindedness you have demonstrated. We wish you good luck and health in this next phase of your lives. And we thank you.

The request we make for funds for the Port of New York and New Jersey is not a casual one. Although federal budget recommendations are not available, the sums we ask for are what we believe necessary to continue and advance existing navigation projects and provide for much-needed studies, based on our ongoing partnership with the Corps of Engineers. We and the other local sponsors are prepared to provide the local share of funds as required. All told we recommend an appropriation of $39.65 million in federal funds for Fiscal Year 1997 allocated among construction, studies, and operation and maintenance of federal navigation projects.

Category	Port Recommendation
Construction	
Kill van Kull and Newark Bay Channels, NY & NJ	$750,000
New York Harbor Collection and Removal of Drift, NY & NJ	100,000
New York Harbor and Adjacent Channels (Port Jersey), NJ	500,000
Studies	
New York Harbor and Adjacent Channels (Claremont Channel), NJ	400,000
New York and New Jersey Channels, Arthur Kill Channel, Howland Hook Marine Terminal, NY	1,000,000
New York Harbor Anchorages, Red Hook Flats Anchorage, NY	100,000
New York and New Jersey Channels, Perth Amboy Anchorage, NY & NJ	100,000
Operation & Maintenance	
Dredged Material Management Plan	6,000,000
New York and New Jersey Harbor, Condition Surveys	700,000
Maintenance Dredging Construction, Selected Channels	30,000,000
Total	$39,650,000

Kill van Kull and Newark Bay Channels, NY & NJ

Kill van Kull and Newark Bay Channels, NY & NJ is a harbor deepening project authorized for construction in the Fiscal Year 1985 Supplemental Appropriations Act (Public Law 99-88) and the Water Resources Development Act of 1986. Local cooperation is being provided by The Port Authority of New York and New Jersey of which the estimated non-federal cost is approximately $263 million for this project. Phase I of this project, the deepening of the channel from 35 to 40 feet, is nearly complete at an estimated cost of $300 million. The construction schedule for this portion of the project was originally estimated to be 3 years but actually took 8 years. We have asked the Corps of Engineers to re-estimate the cost for Phase II of the authorized project for deepening the channel to 45 feet, but they have been slow to respond. The channels at issue serve the busiest and largest container port facilities on the Atlantic seaboard and we have heard a consistent message from the steamship lines that service the Port Newark and Elizabeth Marine Terminals of Newark Bay and from the harbor pilots that the completion of the project to 45 feet is an absolute necessity. The full benefits of the authorized 45 feet navigation project have been postponed due to construction delays. We believe it is imperative that Phase II engineering and design be completed as soon as possible so that construction can commence immediately and we will be prepared to provide local share.

Mr. Chairman, based on our understanding of the project and schedule we request that $750,000 be appropriated in Federal Fiscal Year 1997 to complete the General Re-Evaluation Report, now underway, by June 1997 and to allow construction to resume in FY 1998.

Operation and Maintenance

Under the category of Operation and Maintenance, the past Administration's budget recommendations have been satisfactory for the maintenance of the Port of New York and New Jersey federal channel system and have allowed the Port to continue to contribute nearly $20 billion to the regional economy. Once the federal budget recommendations are available to the public, we may seek to change our recommendations known to the Committee should the need arise. Last year members of our congressional delegation advised this subcommittee of the severe problems we are experiencing in the management of dredged materials, including sediments dredged from terminal berths, for lack of adequate disposal facilities. I believe it was last year that General Hunter told this panel that our port was heading toward a crisis. Mr. Chairman, you should be made aware that the Port of New York and New Jersey **is** facing a crisis that is starting to take its toll in the lack of maintenance dredging by the Corps of Engineers of the federal channels serving commercial interests because there is no viable disposal alternative for dredged material unsuitable for ocean disposal. The Corps has made presentations that list parts of federal channels in the Arthur Kill, NY and NJ; Bay Ridge/Red Hook, NY; Hackensack River, NJ; Hudson River NY and NJ; Eastchester Creek, NY; and Portchester Harbor, NY as having approximately 3 million cubic yards of shoaled contaminated sediments that need to be dredged. These projects have been deferred and will continue to be deferred unless a solution is found.

Mr. Chairman, we fear that the FY97 Corps budget will not include funding for channel maintenance construction because practical disposal sites have yet to be identified. If funding is omitted for that reason it will only aggravate the problem in our port. Funds should be appropriated to ensure they are obtainable when suitable disposal sites are available. We further believe not providing funds for maintenance dredging would be inequitable. The New York Customs District collects more than $70 million for the Harbor Maintenance Trust Fund. Today, we seek $30 million to be appropriated for maintenance dredging construction for the projects that sorely need restoration to authorized project depths so that the shippers and vessels that pay the tax can see the benefit of their contribution.

Mr. Chairman, on a related matter, Congress authorized the Corps of Engineers to provide condition surveys of the navigation channels on a bi-annual basis and we respectfully request an appropriation of $700,000 to perform this task to ensure safety of navigation and protection of the environment. Furthermore we ask that $6 million be appropriated to complete the much-needed studies of the Dredged Material Management Plan which will provide solutions to the dredged material disposal crisis of the Port of New York and New Jersey. But I must say, we are frustrated by a federal study process that takes so long to complete before real solutions can be implemented. Regional discussions that include the states and federal agencies are in their third year and while progress has been made there are no immediately implementable disposal alternatives in the region. Nor has there been agreement on disposal facilities to provide capacity for the long term. Key to most any solution is the readiness of the federal government to participate in not only planning but in the construction of a disposal facility. It is our fervent hope that this Congress will clearly direct the Corps of Engineers to participate in the construction of confined disposal facilities in ports where federal and local dredging projects require it. In total, we are requesting $36.7 million in Operation and Maintenance appropriations, representing approximately one half of our contribution to the Harbor Maintenance Trust Fund.

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Mr. Chairman and distinguished members of the Subcommittee, I am Joseph T. Grossi, Executive Director, New Jersey Department of Commerce and Economic Development's Maritime Advisory Council..

New York Harbor and Adjacent Channels (Port Jersey Channel), NJ

The Port Jersey Channel in Bayonne, New Jersey, currently serves 15 shipping lines at Global Terminal. This facility handles annually over 400 vessel arrivals with approximately 200,000 twenty-foot unit containers. More than 300 terminal employees with an annual payroll of $21 million, as well as another 120 contract workers, depend on this facility for their livelihood. As a privately owned terminal, Global pays over $4 million in federal, state and local taxes annually. In addition, the channel also provides access for the U.S. Military Ocean Terminal and the Port Authority Auto Marine Terminal. This channel improvement was authorized for construction by the Water Resources Development Act of 1986.

As you know, recent events such as new testing protocols and criteria for dredged material have complicated matters and additional disposal alternatives had to be studied. The State of New Jersey is evaluating potential upland disposal sites and is prepared to enter into a project cooperating agreement. Therefore, we request $500,000 for this project to complete the study and finalize conditions of local cooperation and move this project into construction of the channel to a project depth of 41 feet below mean water in Federal Fiscal Year 1998.

New York Harbor and Adjacent Channels (Claremont Channel), NJ

Located on the Hudson River in New Jersey, Claremont Channel has an average depth of 27 feet mean low water. A project to deepen Claremont Channel to 42 feet mean low water was authorized for construction in the Water Resources Development Act of 1986. Although authorized to 42 feet, the Phase I modified project will provide adequate shipping economies with a 34-foot channel.

Two scrap metal exporting companies and a crushed stone aggregate terminal are the major users of this channel. The scrap metal exports have averaged over 600,000 long tons per year and are by far our region's number one export. Meanwhile, the crushed stone transshipments approach 4 million tons annually. Combined, these three firms employ 300 persons directly and provide nearly 3,000 indirect jobs through suppliers, truckers and longshoremen.

We request $400,000 in appropriations to conclude preconstruction engineering design work for improvements to the Claremont Channel. The State of New Jersey supports this project as well and has expressed an intent to fund the non-federal share and is studying potential upland disposal sites.

New York and New Jersey Channels, Raritan Bay Anchorages, NY & NJ

The Perth Amboy Anchorage, NY & NJ, is part of the New York/New Jersey Channels project. It was constructed to accommodate ocean bulk vessels and tankers. There is no additional capacity within this anchorage to accommodate today's modern tankers. The anchorage was dredged to a depth of 37 and 25 feet deep. This design cannot accommodate today's modern ships which are almost 1,000 feet long with drafts of 40 feet or greater.

The Corps has the authority to undertake this feasibility study of the Perth Amboy Anchorage as part of the New York and New Jersey Channels and published as House Document 18, Seventy-first Congress, Second Session. The States of New Jersey and New York support this project and have expressed an interest in funding the non-federal share and are evaluating potential upland disposal sites. Therefore, to provide safe navigation and maintain our bistate port's capability to accommodate today's tankers, we urgently request that $100,000 be appropriated to commence a feasibility study for the deepening of the Perth Amboy Anchorage.

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Mr. Chairman, I am Bridget Wieghart, Vice President for Transportation, New York City Economic Development Corporation.

New York Harbor Collection and Removal of Drift, NY & NJ

We are here today requesting an appropriation of $100,000 for this critical project. **The New York Harbor and Collection of Drift Project, NY & NJ,** removes sunken hulls and decaying shore structures that are the sources of dangerous and costly harbor drift which also fouls our beaches. The Corps of Engineers has estimated that nearly 18,000 commercial, public and recreation vessels collide annually with drift in our port causing damage to propellers, shafts and hulls. The annual associated repair costs and other economic losses average greater than $53 million. This project was authorized under the Water Resource Act of 1974, Water Resources Development Act of 1976, the Supplemental Appropriations Act of 1987 and the Water Resources Act of 1988 with an annual authorization of $6 million.

These funds, in addition to FY96 monies carried over, are to be used to continue construction along the Brooklyn II Reach on the New York side where there is very serious structural deterioration of many of the pier structures. The funds would also be used to continue construction of the remaining work in the Weehawken-Edgewater Reach, and undertake removal of derelict barges in the Passaic River, and to continue the engineering and design of Bayonne, Shooters Island, Kill van Kull, Arthur Kill, NY and NJ reaches. Mr. Chairman, there is much work to be accomplished and we thank you for your consideration of this request for a federal budget appropriation of $100,000.

New York and New Jersey Channels, Arthur kill Channel, Howland Hook Marine Terminal, NY and Tosco Oil Terminal, NJ

The **Arthur Kill Channel, Howland Hook Marine Terminal** project was authorized by the Water Resources Development Act of 1986 and in the Water Resources Development Act of 1992, Section 329 the Secretary was authorized to complete planning and design of the project. The channel improvement includes deepening the existing 35-foot channel to 41 feet from its confluence with the Kill van Kull Channel to the Howland Hook Marine Terminal and Tosco Oil Terminal, NJ, and selected widenings and realignments of the channel for safety. The Port Authority has invested $35 million to modernize this terminal and, with New York City, approximately $18 million was spent for the maintenance dredging required to put this terminal in service. Therefore, we respectfully request $1 million to be appropriated to fully realize the full economic benefits of the re-opening of the Howland Hook Marine Terminal by completing the General Re-Evaluation Report in order to initiate construction in Federal Fiscal Year 1999.

New York Harbor Anchorages, NY & NJ

The **Red Hook Flats Anchorage, NY,** is part of the New York Harbor and Adjacent Channels project. It was constructed to accommodate ocean going cargo ships and tankers. There is no additional capacity within this anchorage to accommodate today's modern vessels. The anchorage was designed by the Corps of Engineers in the early 1960s for a vessel averaging 525 feet in overall length and with a draft of 30 feet. Today's modern ships are almost 1,000 feet long with drafts of 40 feet or greater, therefore requiring additional space and depth beyond that allowed for in the original design.

Therefore, to provide safe navigation and maintain our bistate port's capability to accommodate today's vessels, we urgently request that $100,000 be appropriated to commence a feasibility study for the deepening of Red Hook Flats. The Corps has the authority to undertake this study under a congressional resolution adopted by the Senate Committee on Environment and Public Works on December 5, 1980. The States of New York and New Jersey support this project and expressed an interest to fund the non-federal share and are studying potential upland disposal sites.

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On behalf of Mrs. Lillian Borrone, Mr. Joseph Grossi and myself, we thank you for the courtesy of presenting our recommendations to the Committee. We will be pleased to try to answer any questions you may have.

Mr. GROSSI. Mr. Chairman, Mr. Bevill, and distinguished members of the subcommittee, I am Joseph T. Grossi, Executive Director of the New Jersey Department of Commerce and Economic Development Maritime Advisory Council.

There are three projects, navigation projects in the Port of New York and New Jersey, and they are the Port Jersey Channel in Bayonne which presently serves 15 shipping lines at Global Terminal. This facility handles approximately 400 vessel arrivals each year with 200,000 container units, more than 300 terminal employees with a payroll of $21 million, as well as another 120 contract workers depend on this facility for their livelihood. As a privately owned terminal, Global pays over $4 million in Federal, State, and local taxes annually.

Again, we heard about the dredge material problems in the port. And at present, the State is evaluating potential upland disposal sites. It is prepared to enter into a local cooperating agreement on this project, and we therefore wish to request $500,000 for this project to complete the study and finalize conditions of local cooperation and advance this project to construction in fiscal year 1998.

The second project is the Claremont Channel, which is just north of the Port Jersey Channel on the Hudson River in Jersey City. And that channel at present is at 27 feet mean low water. Although it is authorized to 42 feet, Phase I of the modified project would take it to 34 feet.

Now this project supports major scrap exporting out of New Jersey and out of the United States, and it is responsible for 600,000 long tons per year.

We request an appropriation of $400,000 to conclude the preconstruction engineering design work for this project. And again, for the disposal, we are investigating potential upland disposal sites.

The next project is the Perth Amboy Anchorage in the Raritan Bay of New Jersey. It was constructed to accommodate ocean bulk vessels and tankers. There is no additional capacity now within this anchorage to accommodate today's modern vessels which are 1,000 feet in length and 40 feet or greater in draft.

The Corps has the authority to undertake this feasibility study and we wish to support $100,000 for this feasibility study, again with the disposal being looked at for potential upland disposal sites.

Mr. FRELINGHUYSEN. Thank you very much.

Both Members of Congress from New York and New Jersey need to work together, as do obviously the Governors of those States, with the Army Corps. Certainly from my observation, which you have reinforced today and you have done on previous occasions, we need to get moving. We are suffering the economic consequences as we speak.

Ms. BORRONE. You are right, Mr. Chairman. And thank you for all of your support.

Mr. FRELINGHUYSEN. Mr. Grossi, are you planning to testify wearing a second hat?

Mr. GROSSI. Yes, sir, I have Bernie Moore. He is the administrator of our department.

Mr. FRELINGHUYSEN. Ms. Borrone, thank you for testifying. You are welcome to stay right there if you like.

WEDNESDAY, FEBRUARY 28, 1996.

NEW JERSEY PROJECTS

WITNESS

JOSEPH T. GROSSI, EXECUTIVE DIRECTOR, MARITIME ADVISORY COUNCIL OF NEW JERSEY

Mr. GROSSI. I don't know. We are going to the Delaware River projects.

Mr. Chairman, it is a pleasure to appear before you on appropriations of great importance to New Jersey and our residents. I have already introduced myself. And accompanying me is Bernard J. Moore, Administrator of the Division of Engineering and Construction of the State Department of Environmental Protection. We are here today to express our appreciation for past years' appropriations and to outline our recommendations for fiscal year 1997 funding of civil works projects of importance to the entire State of New Jersey.

Our requests total $86 million and are necessary to advance and continue projects and provide for studies to develop solutions to the dredged material management predicament currently impacting port operations.

In past years, sufficient funding has been provided for projects and also for the operation and maintenance of projects. And for this we wish to give special thanks to Chairman Myers, Mr. Bevill, and the committee.

The following project summary will provide a clear understanding of our State's unique needs, and we ask that you carefully consider them. And there is a chart on our summary on pages 2 and 3 of our testimony, which summarizes our requests. I would also like to request that the entire testimony be made a part of the record.

Mr. FRELINGHUYSEN. You can consider it done. There will be no objection.

Mr. GROSSI. One project I would like to point out on is the Delaware River, Philadelphia to the Sea. And Congressman Saxton mentioned it this morning, and we wish to support the continued operation of that project—operation and maintenance of that project which in fiscal year 1997 we feel will require $14.2 million.

As many of the other navigation projects have already been touched upon, I would like to move into the flood control and flood damage protection.

Mr. FRELINGHUYSEN. Is Mr. Moore going to testify as well?

Mr. MOORE. No.

Mr. GROSSI. He is for moral support.

There are three projects under the continuing authority program: The Mill Brook, Newton Creek, and Poplar Brook, New Jersey. And under this program, these projects can progress through the study phase to construction. For Mill Brook, we ask $500,000 to continue this study and prepare the plans and specifications. Newton Creek, we wish to request an appropriation of $560,000 to continue the study phase and also enter into plans and specifications. And for Poplar Brook, we wish to request $300,000 to complete the study phase in fiscal year 1997.

The next project you have already heard about this morning, Raritan River, Green Brook River Basin, and we support the request of that commission for $3 million to continue the current study phase and begin to prepare plans and specifications.

The Raritan River Basin, South River. Recent storms have caused extensive damage to residential and commercial properties from Sayreville and South River, and we wish to request $275,000 in fiscal year 1997 to continue the feasibility phase of this project.

Under the category of shore protection, we have the Barnegat Inlet to Little Egg Harbor. This study will review the existing beach erosion and flood control projects to determine modifications necessary to provide protection, and we wish to request $590,000 in fiscal year 1997. The Department of Environmental Protection, is of course—has expressed their intent to cost share this study.

You also heard testimony this morning on Great Egg Harbor and Manasquan Inlets so we will pass over those and go to a larger project.

The Sandy Hook to Barnegat Inlet. Erosion and storms have seriously reduced the width of most beaches in the study area with exposure of the shore to storm damage. The State of New Jersey has stated its support for this project, and we wish to request an appropriation of $21 million for this project to continue construction.

Under the category of operation and maintenance, there is a total of nearly $38 million for 16 projects. And they cover all of the categories that we have talked about: navigation, flood protection, shore protection, beach erosion, and water supply.

Mr. Chairman, we appreciate the past support of this subcommittee and ask you to carefully consider our requests made for funding in fiscal year 1997. These requests are made with a special eye towards the most efficient use of both Federal and State funds.

In closing, on behalf of New Jersey, I wish to thank you for the opportunity to appear before the subcommittee and extend best wishes and good health to Chairman Myers and Mr. Bevill as they retire from Congress. Thank you.

Mr. FRELINGHUYSEN. Thank you for your testimony and we will do our best to work with you both. Thank you, gentlemen.

[The statement of Messrs. Grossi and Moore follow:]

STATEMENT OF THE STATE OF NEW JERSEY
DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT
MARITIME ADVISORY COUNCIL OF NEW JERSEY

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEPARTMENT OF TRANSPORTATION

ON BEHALF OF APPROPRIATIONS IN FISCAL YEAR 1997
FOR FEDERAL CIVIL WORKS PROJECTS IN NEW JERSEY

PRESENTED TO THE ENERGY AND WATER DEVELOPMENT
SUBCOMMITTEE ON APPROPRIATIONS

U.S. SENATE
U.S. HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.

FEBRUARY 28, 1996

ENDORSED BY:

BRIDGETON MUNICIPAL PORT AUTHORITY (NJ)
DELAWARE RIVER & BAY AUTHORITY (DE/NJ/PA)
DELAWARE RIVER PORT AUTHORITY (NJ/PA)
INTERNATIONAL. UNION OF OPERATING ENGINEERS/LOCAL 25
JOINT EXECUTIVE COMMITTEE FOR THE IMPROVEMENT OF THE DELAWARE (PA)
MARITIME ASSOCIATION OF THE PORT OF NEW YORK/NEW JERSEY
MARITIME EXCHANGE FOR THE DELAWARE RIVER AND BAY (NJ/PA)
MARITIME RESOURCES COUNCIL (NJ)
MARINE TRADES ASSOCIATION OF NEW JERSEY
NATIONAL DREDGING ASSOCIATION, NEW JERSEY CHAPTER
NEW JERSEY ALLIANCE FOR ACTION
NEW JERSEY MARINE SCIENCES CONSORTIUM
NEW JERSEY SHORE AND BEACH PRESERVATION ASSOCIATION
NEW JERSEY STATE CHAMBER OF COMMERCE
NEW JERSEY STATE COMMISSION OF PILOTAGE
NEW YORK SHIPPING ASSOCIATION, INC. (NY/NJ)
NEW YORK-NEW JERSEY PORT PROMOTION ASSOCIATION
PENJERDEL COUNCIL (PA/NJ/DE)
PERTH AMBOY WATERFRONT COMMITTEE (NJ)
PILOT'S ASSOCIATION FOR THE BAY AND RIVER DELAWARE (DE/NJ/PA)
PORT AUTHORITY OF NEW YORK AND NEW JERSEY
SAVE OUR PORT COALITION (NY/NJ)
SOUTH JERSEY PORT CORPORATION (NJ)
SOUTHERN NEW JERSEY DEVELOPMENT COUNCIL
TOWBOAT AND HARBOR CARRIERS CONFERENCE, AWO
UNITED NEW JERSEY SANDY HOOK PILOTS BENEVOLENT ASSOCIATION
UNITED NEW YORK SANDY HOOK PILOTS BENEVOLENT ASSOCIATION
WATER RESOURCES ASSOCIATION

Mr. Chairman and Members of the Subcommittee, it is a pleasure to appear before you today on appropriations of great importance to New Jersey and our residents. I am Joseph T. Grossi, Executive Director of the New Jersey Department of Commerce and Economic Development's Maritime Advisory Council Accompanying me today is Bernard J Moore, Administrator, Division of Engineering and Construction, of the State Department of Environmental Protection We are here today to express our appreciation for past years' appropriations and to outline our recommendations for Fiscal Year 1997 funding of civil works projects of importance to New Jersey Our requests total $86,005,000 and are necessary to advance and continue projects and provide for studies to develop solutions to the dredged material management predicament currently impacting port operations

As the President's FY'97 proposed Budget had not as yet been released when this testimony was prepared, our requests are based upon last year's appropriations and current project schedules. Using the historical information available, we also developed funding requests for Operations and Maintenance projects In past years, sufficient funding has been provided to continue the operation and maintenance of constructed projects critical to the safety of our residents and the strength of our state and regional economy

The following projects summary will provide you with a clearer understanding of our state's unique needs. We ask that you carefully consider our requests for funding of these projects in FY'97 (Charts summarizing our recommendations are on pages 2 and 3 of this testimony.)

NAVIGATION

Arthur Kill Channel, Howland Hook Marine Terminal, NY and NJ (PE&D)

This project includes deepening the existing 35 ft channel to 41 ft from its confluence with the Kill Van Kull Channel to the Howland Hook Marine Terminal in New York and the Tosco Oil Terminal in New Jersey We wish to support the request by the Port Authority of New York and New Jersey that $1,000,000 be appropriated in FY'97 to complete the General Reconnaissance Report (GRR) and commence construction in FY'98

Delaware River at Camden, NJ (O&M)

This project is located adjacent to the east channel edge of the Delaware River project at Camden Marine and Beckett Street Terminals in Camden, New Jersey. We wish to express our support for a Fiscal Year 1997 appropriation of $20,000 for this Operation and Maintenance channel conditions survey.

Delaware River, Philadelphia to the Sea, PA, NJ and DE (O&M)

The existing project provides for a nearly 100-mile channel from Camden, New Jersey and Philadelphia, Pennsylvania to deepwater in Delaware Bay, and six anchorage areas Continued maintenance dredging throughout the project length is required We wish to request that $14,200,000 be included in the FY'97 budget for this critically important operation and maintenance channel project. Port facilities in three states benefit from this project.

Delaware River Main Channel, NJ, PA and DE (PE&D)

The project extends over 100 miles from deepwater in the Delaware Bay to the Ports of Philadelphia, Pennsylvania and Camden, New Jersey. Fiscal Year 1997 funds will be used to continue PE&D, environmental and economic studies and initiate preparation of the draft Design Memorandum We wish to express support for an FY'97 appropriation of $160,000 to continue this PE&D effort.

Dredged Material Management Plan (O&M)

We wish to request an FY'97 appropriation of $6,000,000 to continue the much-needed studies of the Dredged Material Management Plan to provide solutions to the dredged material disposal crisis within the Port of New York/New Jersey.

Kill Van Kull and Newark Bay Channel, NY and NJ (Construction)

The present 40 ft. channel precludes modern ocean voyage container ships from full loading Substantially increased shipping costs, if allowed to continue, will discourage fleets with larger draft vessels from utilizing these facilities The Corps of Engineers is now developing the cost estimates for Phase II of the authorized project, the deepening of the channel to 45 feet. The Port Authority of New York and New Jersey is requesting $750,000 in FY'97 to complete the GRR for the next phase of this project. We wish to express our support for this request.

New Jersey Intracoastal Waterway, Dredged Material Environmental Restoration (Study)

We wish to request that $370,000 be appropriated in FY'97 for this new start reconnaissance study of beneficial uses for dredge material and wetlands restoration.

New York Harbor and Adjacent Channels, Claremont Channel, NJ (PE&D)

Claremont Channel is a non-federal channel with an average depth of 27 ft. While authorized for construction to a depth of 42 ft, the modified project will provide improved shipping economies with a 34 ft. deep channel. The principal users of the channel are scrap metal dealers exporting an average of 675,000 tons annually. We wish to request an FY'97 appropriation of $400,000 to complete the PE&D necessary to advance the construction phase of this improvement in FY'98. The state of New Jersey is presently evaluating potential upland disposal sites for the dredged material.

SUMMARY OF NEW JERSEY
FEDERAL CIVIL WORKS APPROPRIATIONS
FISCAL YEAR 1997

PROJECT	*PROJECT SPONSOR RECOMMENDATION*

NAVIGATION

ARTHUR KILL CHANNEL, HOWLAND HOOK MARINE TERMINAL, NY & NJ (PE&D)	1,000,000
DELAWARE RIVER MAIN CHANNEL, PA, NJ & DE (PE&D)	160,000
KILL VAN KULL & NEWARK BAY CHANNELS, NY & NJ (CONSTRUCTION)	750,000
NJ INTRACOASTAL WATERWAY, DREDGED MATERIAL ENVIRONMENTAL RESTORATION (STUDY)	370,000
NY HARBOR & ADJACENT CHANNELS, CLAREMONT CHANNEL, NJ (PE&D)	400,000
NY HARBOR & ADJACENT CHANNELS, PORT JERSEY CHANNEL, NJ (CONSTRUCTION)	500,000
NY HARBOR ANCHORAGE AREAS, NY & NJ (STUDY)	100,000
NY HARBOR & ADJACENT CHANNELS, RARITAN BAY ANCHORAGE, NY & NJ (STUDY)	100,000
NY HARBOR COLLECTION & REMOVAL OF DRIFT, NY & NJ (CONSTRUCTION)	100,000
W.R.D.A. 92, SECTION 405, SEDIMENTS DECONTAMINATION TECHNOLOGIES (STUDY)	3,000,000
CATEGORY SUBTOTAL	**$6,480,000**

FLOOD CONTROL/FLOOD DAMAGE PROTECTION

MILL BROOK, NJ (STUDY - CONTINUING AUTHORITY PROGRAM)	500,000
MOLLY ANN'S BROOK AT HALEDON, PROSPECT PARK AND PATERSON, NJ (CONSTRUCTION)	7,500,000
NEWTON CREEK, NJ (STUDY - CONTINUING AUTHORITY PROGRAM)	560,000
POPLAR BROOK, NJ (STUDY - CONTINUING AUTHORITY PROGRAM)	300,000
RAMAPO RIVER AT OAKLAND, NJ (PE&D)	560,000
RARITAN RIVER BASIN, GREEN BROOK SUB-BASIN, NJ (CONSTRUCTION)	3,000,000
RARITAN RIVER BASIN, SOUTH RIVER, NJ (STUDY)	275,000
STONY BROOK, PRINCETON, NJ (STUDY)	150,000
CATEGORY SUBTOTAL	**$12,845,000**

PLANNING ASSISTANCE

SECTION 22, P.L. 93-251 (STUDY)	300,000
CATEGORY SUBTOTAL	**$300,000**

SHORE PROTECTION/BEACH EROSION

BARNEGAT BAY, NJ (STUDY)	350,000
BARNEGAT INLET TO LITTLE EGG INLET, NJ (STUDY)	590,000
BRIGANTINE INLET TO GREAT EGG HARBOR, NJ (STUDY)	130,000
BRIGANTINE INLET TO GREAT EGG INLET - ABSECON ISLAND, NJ (PE&D)	950,000
CAPE MAY INLET TO LOWER TOWNSHIP, NJ (CONSTRUCTION)	2,000,000
DELAWARE BAY COASTLINE, DE & NJ (STUDY)	460,000
GREAT EGG HARBOR INLET & PECK BEACH, NJ (CONSTRUCTION)	380,000
GREAT EGG INLET TO TOWNSEND INLET, NJ (STUDY)	500,000
LOWER CAPE MAY MEADOWS, CAPE MAY POINT, NJ (STUDY)	230,000
MANASQUAN INLET TO BARNEGAT INLET, NJ (STUDY)	500,000
RARITAN BAY & SANDY HOOK BAY, NJ (STUDY)	500,000
RARITAN BAY & SANDY HOOK BAY, CLIFFWOOD BEACH, NJ (PE&D)	200,000
RARITAN BAY & SANDY HOOK BAY, NJ, SECTION 934 (STUDY)	350,000
SANDY HOOK TO BARNEGAT INLET, NJ (CONSTRUCTION)	21,000,000
TOWNSEND INLET TO CAPE MAY INLET, NJ (PE&D)	500,000
TOWNSEND INLET TO CAPE MAY INLET, NJ (STUDY)	45,000
CATEGORY SUBTOTAL	**$28,685,000**

SUMMARY OF NEW JERSEY
FEDERAL CIVIL WORKS APPROPRIATIONS
FISCAL YEAR 1997

OPERATION AND MAINTENANCE

PROJECT	*PROJECT SPONSOR RECOMMENDATION*
BARNEGAT INLET, NJ (NAVIGATION)	1,300,000
CHEESEQUAKE CREEK, NJ (NAVIGATION)	430,000
COLD SPRING INLET, NJ (SHORE PROTECTION)	500,000
DELAWARE RIVER AT CAMDEN, NJ (NAVIGATION)	20,000
DELAWARE RIVER, PHILADELPHIA TO THE SEA, NJ, PA & DE (NAVIGATION)	14,200,000
DELAWARE RIVER, PHILADELPHIA, PA TO TRENTON, NJ (NAVIGATION)	1,500,000
DREDGED MATERIAL MANAGEMENT PLAN, NJ & NY	6,000,000
MANASQUAN INLET, NJ (NAVIGATION)	2,300,000
NJ INTRACOASTAL WATERWAY, NJ (NAVIGATION)	2,100,000
NEW YORK & NEW JERSEY CHANNELS, NJ (NAVIGATION)	1,750,000
NEW YORK-NEW JERSEY HARBOR CONDITION SURVEYS	700,000
NEW YORK HARBOR DRIFT REMOVAL, NY & NJ (NAVIGATION)	4,275,000
PROMPTON LAKE, PA (FLOOD CONTROL)	600,000
SHARK RIVER, NJ (NAVIGATION)	400,000
TUCKERTON CREEK, NJ (NAVIGATION)	800,000
FRANCIS E. WALTER DAM, PA (FLOOD CONTROL)	820,000
CATEGORY SUBTOTAL	**$37,695,000**

GRAND TOTAL	**$86,005,000**

NAVIGATION (Continued)

New York Harbor and Adjacent Channels, Port Jersey Channel, NJ (Construction)

The Port Jersey Channel serves 15 shipping lines at the Global Marine Terminal. Annually, this facility handles 400 vessel arrivals. As a privately-owned terminal, Global pays nearly $4 million in federal, State and local taxes annually. Federal, State and local interests are working with the Corps to address disposal issues on a harbor-wide basis. Therefore, we support a federal appropriation of $500,00 for this project. The State of New Jersey is evaluating potential upland disposal sites for the dredged material.

New York Harbor Anchorage Areas, NY and NJ (Study)

The Corps of Engineers was authorized to undertake this study under a Congressional resolution adopted on December 5, 1980. This project will help to provide safe navigation and maintain our bi-state port's productivity by being able to accommodate today's larger class of vessels. We wish to request that $100,000 be appropriated in FY'97 to advance the feasibility study phase of this project

New York Harbor and Adjacent Channels, Raritan Bay Anchorage Areas, NY and NJ (Study)

The reconnaissance effort completed in March 1994 revealed and recommended favorable improvements for the Perth Amboy Anchorage. As this project will help to provide safe navigation, and accommodate vessels awaiting movement to shore-based facilities, we wish to request that $100,000 be appropriated in FY'97 to commence the feasibility study phase of this project.

New York Harbor Collection and Removal of Drift, NY and NY (Construction)

This project consists of the demolition and disposal of derelict vessels, debris along the shores and unoccupied deteriorated shore structures throughout the Port to reduce hazards to navigation by removing potential sources of drift. This project is supported by New York and New Jersey, and we wish to request an FY'97 appropriation of $100,000 to continue this effort.

W.R.D.A. of 1992, Section 405, Sediments Decontamination Technologies (Study)

The Water Resources Development Act of 1992 authorized $5 million for exploring methods of sediment decontamination and its practical use in managing dredged materials. This Corps and EPA effort has investigated a number of promising technologies, all of which require additional study. Continuation of this demonstration project is essential to channel maintenance and can serve as a model for use throughout the country. Port and regional environmental organizations are working together to promote this project. We request that $3 million be appropriated to continue this vital program.

FLOOD CONTROL/FLOOD DAMAGE PROTECTION

Mill Brook, NJ (Study - Continuing Authority Program)
Newton Creek, NJ (Study - Continuing Authority Program)
Poplar Brook, NJ (Study - Continuing Authority Program)

These three flood control projects are within the Continuing Authority Program (CAP). Under this program, these small projects can progress through the study phase right into construction. For Mill Brook, we wish to request an FY'97 appropriation of $500,000 to continue this study and prepare plans and specifications. For Newton Creek, we wish to request an FY'97 appropriation of $560,000 to continue the study phase and enter into plans and specifications. For Poplar Brook, we wish to request an FY'97 appropriation of $300,000 to complete the study phase. State funds are available to support these projects.

Molly Ann's Brook, NJ (Construction)

Major flooding in recent years has adversely affected about 520 residential, commercial and industrial establishments in the 100-year flood plain. This project is authorized for construction under the W.R.D.A. of 1986. We wish to request an FY'97 Budget appropriation of $7,500,000 to continue the construction phase of this project.

Ramapo River at Oakland, NJ (PE&D)

The recommended plan for this study area includes dam modifications designed to reduce flood elevations and provide protection to 300 residences. We wish to request an FY'97 appropriation of $560,000 to advance the PE&D phase of this project.

Raritan River Basin, Green Brook Sub-basin, NJ (Construction)

The Green Brook Sub-basin study area drains 65 square miles of urban, suburban and industrialized area. In 1971, Hurricane Doria caused more than $22 million in damage, while another major storm in 1973 contributed to six deaths and over $25 million in damages. This project is needed to prevent loss of life and property, and we wish to request an appropriation for this project in FY'97 of $3,000,000 to continue the current study phase and begin to prepare plans and specifications for an FY'98 construction start.

Raritan River Basin, South River, NJ (Study)

Recent storms have caused extensive damage to residential and commercial properties in Sayreville and South River, New Jersey. The December 1992 storm caused damages of $6,100,000 in the Basin. We request that $275,000 be appropriated in FY'97 to continue the feasibility phase of this project.

Stony Brook, Princeton, NJ (Study)

This project, which was authorized by Section 729 of the Water Resources Development Act of 1986, is a multi-purpose storm damage reduction, ecological restoration and water quality general investigation. We wish to request an FY'97 appropriation of $150,000 to initiate a new start reconnaissance study of this area.

PLANNING ASSISTANCE

Section 22, P.L. 93-251, Study, NJ (Study)

This project provides planning assistance to states to perform engineering evaluations of water resources problems. There are several planning projects for which we wish to request funds in FY'96 through this program. The funds requested for these proposed studies are $ 300,000 and the State of New Jersey is prepared to financially participate.

SHORE PROTECTION/BEACH EROSION

Barnegat Bay, NJ (Study)

This study will study existing beach erosion/flood control issues in Barnegat Bay. We wish to request an FY'97 appropriation of $350,000 for a new start feasibility study of this project.

Barnegat Inlet to Little Egg Harbor, NJ (Study)

This study will review the existing beach erosion/flood control projects to determine modifications necessary to provide protection. The funds requested for Fiscal Year 1997 will be used to continue the feasibility phase. The State of New Jersey wishes to request that $590,000 be appropriated for this project in Fiscal Year 1997. The Department of Environmental Protection has indicated their intent to cost share this study.

Brigantine Inlet to Great Egg Harbor

This study area covers 15 miles of coastline. The reconnaissance report found more detailed study of shore protection was warranted for the purpose of storm damage reduction. We wish to request an FY'97 appropriation of $130,000 to continue this feasibility study.

Brigantine Inlet to Great Egg Inlet - Absecon Island, NJ (PE&D)

As part of the above 15-mile coastline study area, the feasibility study for this stage of the project was completed with FY'96 funding. We wish to request an FY'97 appropriation of $950,000 to commence the PE&D phase of this effort.

Cape May Inlet to Lower Township, NJ (Construction)
Construction of this project was completed in June 1991 Periodic nourishment again took place in January 1993. The next phase of this project calls for additional beachfill and shoreline monitoring. We wish to request an FY'97 appropriation of $2,000,000 for continuing construction of this project.

Delaware Bay Coastline, NJ & DE (Study)
The goal of this study is to provide information on the long-term shoreline changes which will serve as a basis for sound coastal planning. We wish to support an appropriation of $460,000 in FY'97 to continue the feasibility study phase of this project.

Great Egg Harbor Inlet and Peck Beach, NJ (Construction)
This multiple purpose flood control, shore protection and navigation improvement provides for the modification of an existing beach erosion project. We wish to request an FY'97 appropriation of $380,000 which will provide funds necessary for the periodic monitoring and nourishment of this improvement

Great Egg Inlet to Townsend Inlet, NJ (Study)
The purpose of this study is to investigate shore protection, flood control and water quality problems attributed to natural and man-made conditions. FY'96 funds were used to complete the reconnaissance report. We wish to request an FY'97 appropriation of $500,000 to commence the next phase of this project, the feasibility study

Lower Cape May Meadows, Cape May Point, NJ (Study)
This study addresses restoration and protection of fish and wildlife habitat, and hurricane and storm damage prevention throughout the entire study area. We wish to request an FY'97 appropriation of $230,000 to continue the feasibility study phase of this project.

Manasquan Inlet to Barnegat Inlet, NJ (Study)
These studies are to investigate shore protection/flood control and water quality problems and to determine the effects of those conditions on the coastal environment. Fiscal Year 1996 funds were used to complete the reconnaissance report We wish to request an FY'97 appropriation of $500,000 to commence the feasibility study phase of this project

Raritan Bay and Sandy Hook Bay, NJ (Study)
This storm damage protection study is beneficial to coastal Bayshore communities not presently protected from storm inundation, wave attack and coastal erosion We wish to request an FY'97 appropriation of $500,000 for the reconnaissance study phase for Union Beach.

Raritan Bay and Sandy Hook Bay, Cliffwood Beach, NJ (PE&D)
The authorized project calls for shore protection with beachfill to correct tidal flooding and beach erosion which threatens nearby residential areas. We wish to request an FY'97 appropriation of $200,000, of which $50,000 will be used to complete the reconnaissance study and $150,000 will allow for the feasibility phase of the project to begin.

Raritan Bay and Sandy Hook Bay, NJ, Section 934 (Study)
Section 934 of W.R.D.A. 1986 grants the Corps the authority to study completed beach nourishment projects for a period of up to 50 years to determine if additional improvements are required We wish to request an FY'97 appropriation of $350,000 to complete the feasibility study and advance this project into the PE&D phase.

Sandy Hook to Barnegat Inlet, NJ (Construction)
Erosion and storms have seriously reduced the width of most beaches in the study area with exposure of the shore to storm damage. The State of New Jersey has stated its support for this project and we wish to request an FY'97 appropriation of $21,000,000 for this project. This funding will continue the construction phase of this improvement.

Townsend Inlet to Cape May Inlet, NJ (Study) (PE&D)
This study area is a 12-mile portion of the South Jersey coastline. The purpose of the study is to investigate shore protection/flood control and water quality problems attributed to natural and man-made conditions. We wish to request an FY'97 appropriation of $500,000 to commence the PE&D phase of the project and $45,000 to continue the feasibility study phase.

OPERATION AND MAINTENANCE

Under the category of Operation and Maintenance, we wish to request an FY'97 appropriation of $37,695,000 for 16 civil works projects which impact New Jersey and our regional area These projects are critical to the competitiveness of our ports, tourism industry, water supply, flood control and the safety of our citizens.

Mr. Chairman, we appreciate the past support of this subcommittee and ask you to carefully consider the requests made for funding in FY'97. These requests have been made with a special eye toward the most efficient use of both Federal and State funds. In closing, on half of New Jersey I wish to thank you for the opportunity to appear before this Subcommittee.

WEDNESDAY, FEBRUARY 28, 1996.

VERMILLION RIVER, LOUISIANA

WITNESS

ROBERT BENOIT, DIRECTOR, PUBLIC WORKS, LAFAYETTE PARISH GOVERNMENT

Mr. FRELINGHUYSEN. From New Jersey and New York area to Louisiana. Who is here from Louisiana? Mr. Benoit, gentlemen, welcome. Any copies of material that you have will be put in the transcript in toto. And in the 5 minutes you have allocated, go right ahead.

Mr. BENOIT. Mr. Chairman, Mr. Bevill, and members committee, I will try to be brief.

The frequency of flooding that we have been encountering in Lafayette Parish, Louisiana, left us no choice but to request Federal assistance. That assistance came in the form of an $400,000 appropriation from the Energy and Water Appropriation Act of 1994. That reconnaissance study has recently been completed and we are ready to move forward to feasibility.

I will give you a brief insight. Lafayette is approximately 50 miles west of Baton Rouge and the population is 170,000. The Vermillion River is the main traffic artery, which runs through Lafayette Parish and transfers the water to the Gulf, which is approximately 50 miles away. The southern portion of the recon study area varies from between 5 feet and 7.5 feet above sea level. We in Lafayette are very low and that is one of the problems that make us susceptible to inundation.

Significant floods have been reported in Lafayette as early as 1907. In the last 75 years, we have had 16 major floods. We have had, however, three in the last 5 years. The average rainfall in Louisiana over the last 30 years is 59 inches, however, in the last 5, it has averaged over 73 inches.

The 1993 storm event involved approximately 495 flood insurance claims exceeding $5 million. We had another flood in December of 1995 and those claims are not yet totalled by FEMA. This doesn't, obviously, include the other public and private losses that were encountered such as anything from vehicle damage to uninsured losses, reduction in property value, disruption in business, and loss in public infrastructure.

The local interests are continually making improvements to the flood control structures and now we are requiring on-site retention for large commercial developments, but we are unable to keep pace with the severity of the problem. We feel the frequency and widespread impact of damaging floods warrant Federal assistance.

Structures below the 100-year base flood elevations will continue to flood and inundation will increase with additional development. In new structures, however, flooding will be diminished through the participation in the national flood insurance program. However, we still suffer from inundation in new developments. Unfortunately, the 100-year flood seems to come a lot quicker than every hundred years.

The recon study evaluated nine alternative measures, including diversion of flood waters, retention basins, channel modifications, levees and pump stations, and other nonstructural alternatives. They looked at nine various measures, and two structural alternatives, and the nonstructural alternatives were determined economically feasible to minimize the flood damage in Lafayette Parish. I will focus briefly on those.

Alternative 2A, retention gravity storage to the Bayou Tortue Swamp will reduce the Vermillion River flooding by managing water levels in the Bayou Tortue Swamp. During feasibility, features of alternative 2A will be modified and new features will be added that will ensure that a favorable benefit cost ratio will be established.

Some features of 2A includes low level lift pump station and two gravity structures with sluice gates. The elevation of the southern swamp would be maintained at 3 NGVD; and, when the river reaches 8 NGVD, the gravity structures will be opened. This additional storage should assist——

Mr. FRELINGHUYSEN. If you could summarize a little more.

Mr. BENOIT. We are looking at a gross investment of $3.8 million and cost benefit ratio of 2.733.

On 5A, you are looking at an investment of $26 million with a cost benefit ratio of 1.23. On the two nonstructural measures, one of them is a particular development in Lafayette Parish which is 30 years old. It looks at estimated costs of $1.5 million with a cost benefit ratio of 1.07, and this consists of structure raising.

And the last one is a ring levee that would be constructed around several subdivisions in south Lafayette Parish that has a cost benefit ratio of 5.3 and a $2.2 million price tag.

In summation, the people in Lafayette Parish would like to thank you in Congress for budgeting the funds for the recon study and to request continued funding for the feasibility study. In addition, we would like to see if it would be possible to proceed to preconstruction engineering and design for the nonstructural measures. And one other thing—and for the structural measures that are ready to design. When FEMA's reports are complete from the 1995 flood, I would like to submit those for the record.

Mr. FRELINGHUYSEN. All right. Consider that done, when those reports are ready. Thank you very much for being here. The committee will do its level best to work with you.

[The statement of Mr. Benoit follows:]

LAFAYETTE
PARISH
GOVERNMENT

Walter Comeaux
Parish President

Department of Public Works

February 28, 1996

The Honorable John Myers, Chairman
Energy and Water Appropriations Subcommittee
2165 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman Myers:

I would like to thank you and the members of your Committee for allowing me the time to appear before you. In 1994, the frequency of flooding in Lafayette, Louisiana, left us no alternatives than to solicit Federal assistance in the form of a Reconnaissance Study. In 1994, the Energy and Water Appropriations Act included $400,000.00, which enabled us to initiate the Reconnaissance Study. The Reconnaissance Study was completed by the Corps of Engineers in June, 1995. The purpose of my visit is to request continued funding for the feasibility study, and to request that some of the feasible projects be short-circuited.

The majority of the water in Lafayette drains into the Vermilion River, which captures the run-off from the drainage channels and transports it to the Vermilion Bay, ultimately flowing to the Gulf of Mexico approximately 50 miles away. The southern portion of the study area varies between 5 ft. and 7 ft. above mean sea level.

Significant floods have been reported in Lafayette as early as 1907. In the last 75 years, we have had 16 major floods. What concerns us greatly is the fact that we've had three major floods in the last five years. In the preceding 30 years, Lafayette's annual rainfall was 59 inches; however, in the last 5 years, we have averaged in excess of 73 inches.

The January 20, 1993, flood event involved 495 flood insurance claims exceeding $5 million. This does not include other public and private losses including vehicle flooding, uninsured losses, reduction in property value, disruption of business, and losses in public infrastructures, such as roads and bridges.

Our most recent flood occurred on December 18, 1995, and again caused substantial flooding. FEMA has indicated that they do not yet have the amounts of flood insurance claims for this event. When these are available, I would like the opportunity to submit these for the record.

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The 1940 flood in Lafayette, Louisiana, produced river levels seven feet higher than the January, 1993, flood. If that flood were to occur today, the losses would be catastrophic, and would necessitate the expenditure of a significant amount of money in flood insurance claims.

Local interests are continually making improvements to the flood control structures, and are requiring storm water detention in developments; but we have been unable to keep pace with the severity of the problem. Frequency and widespread impact of damaging floods warrants Federal assistance.

The Reconnaissance Study evaluated nine alternative measures, including diversion of flood waters, retention basins, channel modifications, levee and pump stations, flood control structures and other non-structural alternatives. A study identified two structural alternatives as well as two non-structural alternatives that would determine to be economically and environmentally feasible to reduce the magnitude of flood damages in Lafayette Parish.

Alternative 2.a) is a retention gravity storage to the Bayou Tortue Swamp. This project will significantly reduce the Vermilion River flooding by managing the water levels in the Bayou Tortue Swamp. This project includes low-lift pump stations, as well as gravity control structures. The estimated gross investment of this alternative is $3.8 million; however, this may be modified in feasibility stage to include some of the components of Alternative 3, as recommended by the Corps of Engineers. This alternative provides an annual benefit of $856,000.00, and the benefit:cost ratio is 2.73.

Alternative 5.a) includes channel modifications along the Isaac Verot Coulee. Channels will be improved to carry a 10-year storm within the banks. The estimated investment of this alternative is $26.4 million, and the average annual benefits are $2.7 million. This project also has a favorable benefit:cost ratio of 1.23. This project seems to be a perfect candidate for short-circuiting, and it can be moved forward to the pre-construction and engineering design phase with a minimal amount of work.

Of the four non-structural measures that the Corps investigated, they indicate that two of them have favorable benefit:cost ratios. The first one is identified in the Reconnaissance Study as Area 1--Demanade Park Subdivision. In this project, 50 homes were impacted as a result of the 100-year storm. This particular alternative looked at several options, including flood-proofing, ring levees, and structure-raising. The Corps indicated that structure-raising was the most feasible project for this area. This project has an estimated construction cost of $1.5 million, and a benefit:cost ratio of 1.07.

The Honorable John Myers
February 28, 1996
Page 3

Area 4 includes several subdivisions in south Lafayette Parish, including Quail Hollow. The Corp's study indicated a cost of $2.2 million for construction of ring levees with a benefit:cost ratio of 5.3. It shall be noted that the methods used to investigate the four areas reveal that non-structural measures can be effectively utilized to combat flood damages.

In summation, Mr. Chairman, Lafayette Parish would like to thank Congress for budgeting funds for the Reconnaissance Study, and to request continued funding for the feasibility phase.

In addition, I would like to proceed to pre-construction engineering and design for the non-structural measures, and for the structural measures that are ready to design.

In closing, I would like to thank you for the time and opportunity to speak before you; and my staff and myself will be available to answer any questions that you may have regarding our request. I remain

Sincerely,

Robert Benoit
Director of Public Works

RB:ab

cc: Mr. Walter Comeaux
Congressman James A. Hayes

WEDNESDAY, FEBRUARY 28, 1996.

SHORE PROTECTION PROJECTS

WITNESSES

HON. OWEN PICKETT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF VIRGINIA

LINWOOD BRANCH, COUNCILMAN, CITY OF VIRGINIA BEACH, VIRGINIA

Mr. FRELINGHUYSEN. The Chair would like to recognize Congressman Owen Pickett from Virginia; and he is joined by Councilman Linwood Branch, I believe from the City of Virginia Beach, Virginia, and somebody else as well.

Congressman, thank you for being here.

Mr. PICKETT. Thank you for this opportunity. I know how busy you are.

Mr. Bevill, how are you today?

Mr. BEVILL. Very good.

Mr. PICKETT. Virginia Beach, which is in my district, has 38 miles of exposure on the Atlantic Ocean and about 10 miles or so on the Chesapeake Bay, so it gets hammered from two directions; and I sure hope that your committee here will not be following the administration's lead on this issue of local projects.

Mr. FRELINGHUYSEN. You can be sure Mr. Bevill and I agree on that and so do all Members.

Mr. PICKETT. Virginia Beach is enjoyed not only by the people that live there but every year by 2.5 million people from Ohio, Pennsylvania, New Jersey, lots of places up and down the East Coast. So it is important to our people that we have good beaches, and I hope that you all will continue to help with these projects.

Mr. Branch is the designated hitter for the City Council of Virginia Beach today. He wants to submit his statement for the record.

Mr. FRELINGHUYSEN. Consider it done.

Mr. Branch.

Mr. BRANCH. Mr. Chairman and committee, I would like to talk about three projects of great importance to us.

One is the Virginia Beach Erosion Control and Hurricane Protection Project, which is at a cost of $112 million. The local share is totally funded. This construction project will protect a billion dollars in flood-insured development against a direct hit from a hurricane. It has been under way for 25 years now, and we have invested substantial time and money in the project. Last year, we were finally scheduled to start construction, and we were very pleased when Congress appropriated funds to begin the first phase.

For fiscal year 1997, $11.3 million in Federal funds is needed in order to keep the Corps on schedule. This funding is necessary to keep our 30-month timetable which is very important to us as we are tourist-oriented business down there.

Second, I am here to address the annual beach nourishment program known as Section 934, which was first authorized in the 1986 Water Resources Development Act. Last year, Congress continued to appropriate funds for this program, and the Clinton administration is expected to budget for it again in the upcoming fiscal year.

$925,000 is needed for fiscal year 1997, and we look for your support, I hope.

Finally, Mr. Chairman, I would like to talk about another project that is of importance to us, Sandbridge Beach and Southern Virginia Beach. The City is pleased that Congress appropriated $470,000 for continued preconstruction engineering and design last year. However, this year a "new start" authorization is needed, along with an estimated $6.8 million in Federal funds to ensure that this project moves forward.

Last year, the City Council enacted a special tax district at Sandbridge to fund the local share and will also receive $2.8 million from the Commonwealth of Virginia for the initial nourishment cost. Sandbridge Beach is badly eroded, and we urge a Federal involvement in this project which also protects the very important and fragile ecosystem of the Back Bay Wildlife Refuge.

Mr. Chairman, that concludes my testimony. I thank you for allowing me to be here on behalf of the City of Virginia Beach.

Mr. FRELINGHUYSEN. Thank you for your testimony. We will look forward to working with you.

[The statement of Mr. Branch follows:]

City of Virginia Beach

OFFICE OF THE CITY MANAGER
(804) 427-4242
FAX (804) 427-4135

MUNICIPAL CENTER
VIRGINIA BEACH VIRGINIA 23456-9001

TESTIMONY

The Honorable Linwood O. Branch, III

City of Virginia Beach

before the
House Appropriations Subcommittee on Energy and Water

The Honorable John Myers, Chairman

February 28, 1996

Good Afternoon Chairman Myers and members of the Committee. My name is Linwood Branch. I am a City Councilman for the City of Virginia Beach. It is a privilege to appear before your committee today.

As you probably know, Virginia Beach is a beautiful resort city located only a few hours drive from the nation's capitol. My family happens to be involved in the resort industry as we own a small, independent hotel on the beach front. We know first-hand that the well-being of our beach front is crucial to the City's economy. The 6 miles of commercial beach front are critical to the livelihood of many Virginia Beach residents and the City's financial health since tourism is the biggest employer for the largest city in the Commonwealth of Virginia.

I am here today to discuss three projects of immense concern to the City which are essential to our economic well-being. May I say here, that we are fortunate to have a Congressional delegation which fully supports our efforts.

In 1992, Congress stipulated in the Water Resources Development Act, that a 100-year flood-level protection be included in the design and authorized the **Virginia Beach Erosion Control and Hurricane Protection Project** at a total cost of $112 million. This construction program will protect six miles of commercial and residential beach front, consisting of over a billion dollars in flood insured development, against a direct hit from a hurricane. It is a way for the city to protect the hundreds of millions it has invested in beach front infrastructure and it is a way to provide flood protection for thousands of residences along the shore. This effort has been underway for 25 years and we have invested substantial time and money in this project. Last year, we were finally scheduled to start construction and were very pleased when Congress appropriated the necessary funds to begin the first phase of the project. For FY'97, $11.3 million is federal funds is needed in order to keep the Corps on schedule. This funding is necessary to allow the project to move forward at a pace consistent with a 30-month schedule for completion. Unless this appropriation is forthcoming, the schedule will seriously slip and will greatly lengthen the time necessary for construction and increase the cost to both the local and federal government.

More significantly, we are scheduled to start construction of the first phase of the project this calendar year. A suspension of work that would result from shortfalls in federal funding will threaten the very purpose of the project by exposing the unfinished phases and the constructed first phase to damage from storm events. Further suspension or delays of the works will have severe impacts on our tourism industry as unfinished work may cause closure or restriction of a portion of our boardwalk and beach, causing hotels and resort facilities in the vicinity to lose significant trade.

As I mentioned earlier, the project has been the basis for the renovation of the entire beach front area, and includes a desperately needed water drainage system. We respectfully request that your committee fund the $11.3 million to continue construction on this long awaited project that means so much to our City and the region.

Second, I am here to address the annual beach nourishment program known as **SECTION 934**, which was first authorized in the 1986 Water Resources Development Act (WRDA). Last year, Congress continued to appropriate funds for this program, and the Clinton Administration is expected to budget for it again for the upcoming fiscal year. $925,000 is needed for FY'97, and the City hopes that Congress will again support this ongoing beach renourishment program.

Finally, Mr. Chairman, I would like to briefly discuss another erosion, control and hurricane protection project currently underway at **Sandbridge Beach**, in southern Virginia Beach. The Water Resources Development Act of 1992 authorized the project. The City is pleased that Congress appropriated $470,000 for continued preconstruction, engineering and design last year. However, this year a "new start" authorization is needed along with an estimated $6.8 million in federal funds. To ensure that this project move forward, last year City enacted a special tax district at Sandbridge and will receive a $2.8 million contribution from the Commonwealth for the initial nourishment cost. Sandbridge Beach is badly eroded and we urge the federal involvement continue in this very important project which also protects the fragile ecosystem of the Back Bay Wildlife Refuge.

Mr. Chairman, that concludes my testimony. Thank you for allowing me the opportunity to appear here today on behalf of the City of Virginia Beach.

WEDNESDAY, FEBRUARY 28, 1996.

STILLWATER FLOOD CONTROL PROJECT

WITNESSES

HON. BILL LUTHER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MINNESOTA

JAY L. KIMBLE, MAYOR, CITY OF STILLWATER, MINNESOTA

Mr. FRELINGHUYSEN. The Chair is pleased to recognize Congressman Bill Luther from Minnesota and the Honorable Jay L. Kimble, Mayor, City of Stillwater, Minnesota.

Congressman, good afternoon and welcome.

Mr. LUTHER. Thank you, Mr. Chairman and former Chairman Bevill and members of the subcommittee.

You may recall last spring Chairman Myers and Mr. Bevill and I had an opportunity to meet briefly and to discuss the Stillwater levee project. However, at that time we were unable to move forward with an appropriation because of the delay in the reauthorization of the Water Resources Development Act.

I would like you to know that today the Mayor and I had the opportunity to testify in front of the Subcommittee on Water Resources and the Environment, and we are confident that the House authorizing committee will provide language for the levee repair just as the Senate has. Rather than taking up any more time, I simply want to introduce the man who has worked tirelessly on the levee project and has been of great service to the people of my district, Mr. Jay Kimble, Mayor of Stillwater, Minnesota.

Mr. KIMBLE. Mr. Frelinghuysen, Mr. Bevill and members of the Energy and Water Development Subcommittee, I appreciate the opportunity to come before you today on behalf of the citizens of Stillwater, Minnesota.

We are requesting an appropriation of $2.85 million in Federal funds to complete the repair and extension of the levee wall system at Stillwater, Minnesota. This committee appropriated $2.4 million in the 1994 bill. These funds will provide the resources needed to complete the repair and extension of the levee wall system in accordance with the design memorandum and budget prepared by the U.S. Army Corps of Engineers. The retaining wall protects the fragile riverfront and the floodplain of downtown Stillwater from high water levels and the flooding that occurs each spring.

The Senate Environment and Public Works Committee has included an increased authorization of the project to $11.6 million in the committee's bill, and we have made a similar request before the House Subcommittee on Water Resources and Environment today. This authorization includes the construction of the flood wall system that will provide the city with a 50-year flood protection program.

Fifty-five years ago, the Army Corps of Engineers was building a new lock and dam on the Mississippi River at Red Wing, Minnesota. Knowing that the completion of the dam would back up the waters on the St. Croix, the retaining wall system was built by the WPA in 1937 to protect the City of Stillwater and the commercial operations located there. The earthen and stone levee that existed before the 1930s gave the City very little protection and would quickly wash away with the high waters that were sure to follow when the Red Wing Dam was completed and also each spring with the breakup of the ice. At that time, the City only owned 1,000 feet of the waterfront so that was determined to be the length of the levee wall system.

Today, the levee protects nearly $50 million in commercial property and infrastructure development; but, equally as important, 23 structures in the floodplain are listed on the National Register of Historic Sites. The levee system is in such condition that the project engineer stated that the levee could not withstand another flood like occurred in 1993.

The Corps' own analysis of the condition of the levee in 1991 said that the levee has deteriorated to the extent that there was a strong likelihood that the wall would experience a significant failure within the next 2 years. The report stated that, "Because this whole section of the riverfront property was created by filling during the logging era, soil conditions are suspect."

This is one of the factors that caused the increase in cost of the project. Without soil borings, engineers had estimated that the poor soil conditions would extend 20 to 25 feet. When the borings were taken in the preparation of the project design, they found that the poor soil conditions extended as deep as 75 to 80 feet in certain places. New engineering techniques were required to remedy the condition.

If you would like to turn to the last page of my written testimony, you will see an aerial view of the levee system and the floodplain of downtown Stillwater. The levee now extends from the street in the lower left of the photo to the gazebo, which is the white structure just past the historic lift bridge.

The design memorandum calls for the extension of the levee beginning at the gazebo and extending around Mulberry Point to the Marina seen at the right side of the photo. The extension is critical because the high waters during the runoffs each spring flood the northern end of the riverfront for 4 to 6 weeks or longer, making the emergency road adjacent to the levee impassable for fire protection or emergency medical services on the river.

Phase 3 of the project calls for a flood wall to be constructed approximately 125 feet inland from the existing levee wall. This flood wall will extend 3 feet above the ground, on top of sheet pilings which will extend downward about 20 feet to prevent seepage due the porous soil. Sandbagging during the floods of 1965, 1969 and 1973 did little good because the water flooded the protected area, seeping underneath the sandbags. This flood wall will give the City a 50-year flood protection program, which can be doubled with sandbagging on top of the flood wall with the seepage blocked.

Looking again at the aerial view of the area, the current appropriation will provide only enough funds to repair the levee from the street seen in the left-hand corner to the lift bridge. The repair of the north end of the levee will be terminated, as will the extension of the levee around Mulberry Point and the flood wall.

The pictures on the next to the last page shows the current condition of the levee. You can see that the lower wall which begins at water level has deteriorated completely, leaving nothing to protect the porous soil and wood debris that is protected by the levee.

The walkway has been declared unsafe by the City; and the secondary wall, with no support, has begun to tip forward.

As well as the increased authorization in the Senate bill, the State Legislature of Minnesota has considered this project a highest priority and has provided half of the non-Federal matching funds. The City of Stillwater has set aside the remainder of the matching funds needed. There is no doubt that this project is the City's higher priority. It is critical to the preservation of the State's history and the protection of property.

We respectfully request that this committee include an appropriation in the fiscal year 1997 Energy and Water Appropriations Act in accordance with the design memorandum prepared by the U.S. Army Corps of Engineers. Thank you for your consideration of this critical request and the privilege to appear before this committee today.

Mr. FRELINGHUYSEN. Thank you for being with us. We will do our level best to work with you.

Mr. BEVILL. Good to see you, Bill.

[The statement of Messrs. Luther and Kimble follows:]

Subcommittee on Energy and Water Development
The Honorable John T. Myers, Chairman
Committee on Appropriations
United States House of Representatives
Washington, D.C.

Statements
of
The Honorable Bill Luther, Representative
Minnesota 6th District
and
Jay L. Kimble, Mayor
City of Stillwater, Minnesota

Request to Amend the FY 1994 Appropriations Act by Increasing the Appropriation of Funds for the:

"Design, Repair, Construction, Extension and Expansion of The Levee Wall System on the St. Croix River at Stillwater, Minnesota"

February 28, 1996

Statement of Jay L. Kimble, Mayor
City of Stillwater, Minnesota

Chairman Myers and Members of the Appropriations Subcommittee, I appreciate the opportunity to submit this testimony requesting $2.85 million in federal funds to complete Phases I and II of the retaining wall system on the St. Croix River at Stillwater, Minnesota. The retaining wall protects the fragile riverfront, and the floodplain of downtown Stillwater from high water levels and the flooding that occurs each spring. I would like to request that the full text of my statement be included in the record.

Legislative Summary:

This project was first authorized for $3.2 million in the Water Resources Development Act of 1992, and this Committee designated $2.4 million in federal funds for the purpose of designing, repairing, extending, and expanding the levee wall system in the FY 1994 Appropriations Act. The Minnesota Legislature has set aside $400,000 in State funds for the first phase of the project, and the Governor and Legislature have recommended $375,000 of additional funding in 1996, for the first two phases of the project. The City of Stillwater set aside $750,000, which with the $750,000 of State funds, will provide the required non-Federal matching funds needed for Phase I and II of the project.

Recognizing that additional funds would be necessary, and the urgency that the work be completed as soon as possible, the Senate Environment and Public Works Committee has authorized $11.6 million for the reconstruction of the existing levee, the extension of the levee to the North, and for the expansion of the levee wall system by the construction of a flood wall. The project will then provide the City with a fifty year flood protection program. We are testifying before the House Water Resources and Environment Subcommittee today, and are confident that they also will increase the project authorization in the mark-up of their bill.

Project Phases:

The $2.85 million requested will be used to complete the repair and reconstruction of the existing levee, and to extend the levee 900 feet along the North end of the waterfront to prevent the annual flooding that occurs in that area. In developing the plans and specifications for the project, the U.S. Army Corps of Engineers has divided the project into three phases:

Phase I includes the repair and reconstruction of the existing 1,000 foot levee wall system where severe erosion has occurred, the development of the plans and specifications for Phase I, the preliminary design for Phases II and III, and the rip rap treatment of the South end of the levee. The rise in the elevation at that point permits rip rap to be used rather than extending the levee wall system.

Phase II includes the extension of the levee wall 900 feet to the north, and will require approximately 4 feet of fill along the waterfront, and the completion of the plans and specs for Phase II. The North end of the riverfront is the point in the river hat floods annually, making the emergency roadway next to the levee unusable for 4-6 weeks each Spring.

Phase III consists of the construction of a secondary flood wall approximately 125 feet inland from the existing structure. The wall will extend about two feet above the ground, with sheet piling will be driven 15 to 20 feet below the surface. This wall will provide the City with a 50-year flood protection plan, and with the use of sandbags, a 100-year protection program.

Page 2. Stillwater, MN/St. Croix River Project

Project Funding Status:

The "Design Memorandum" developed by the Army Corps of Engineers was completed in March, 1995, and includes the preliminary design for all three phases of the project.

The completion of the total project will require $8.7 million in Federal funds of which $2.4 million were appropriated in the FY 1994 Act. The completion of Phase I and II will require $2.85 million in Federal funds, and the completion of Phase III approved, will require $4.6 million. State and local resources will provide the 25% non-Federal share.

We are aware of the tight budget constraints under which this Committee is working. We are, therefore, giving our first priority to the allocation of the funds in FY 1997 that can resolve the most critical problem facing our community, - - the deterioration of the levee wall protecting our City. This work will require $2.85 million in Federal funds which will be used to complete phases I and II, the repair, reconstruction of the damaged levee wall system, and the 900 foot extension of the levee.

The Retaining Wall and Current Conditions:

The wall system and the foundation on which the lower wall rests has experienced severe erosion over the past ten years or so. Preliminary reports by the Army Corps of Engineers and the Short, Elliott, and Hendrickson (SEH) engineering firm, warn that extensive repair, replacement, and extension of the wall system must be initiated immediately.

The retaining wall system was built by the Works Progress Administration (WPA) in 1937-38, to provide protection to the commercial section of the City, and the docking areas of boats and barges. Fifty-five years ago, there was a crisis, just as there is today. The Corps was building a new lock dam on the Mississippi River at Red Wing, Minnesota that would back up the waters of the St. Croix. The earthen and stone levee of the early 1930's, gave the City some protection, but would quickly wash away with the high waters that would sure to follow when the Red Wing Dam was completed, and the break up of the ice each spring.

Stillwater is located on the West bank of the St. Croix River. It provides the boundary line between Minnesota and Wisconsin for about 120 miles until the St. Croix flows into the Mississippi River. The St. Croix is one of America's first "Wild and Scenic Rivers," and is subject to the legislation that protects these beautiful landmarks of our nation. One of the few lift bridges in the upper Midwest spans the river from Stillwater to Houlton, Wisconsin. The base of the bridge is built into the levee wall. The failure of the wall at that point would result in the closing of the bridge for some time, according to the U.S. Army Corps of Engineers.

An emergency city street runs parallel to the upper section of the wall. The roadway is used by the City for wall maintenance, emergency medical and river rescue work, and serves the fire department by providing access to river water during fire emergencies in historic downtown Stillwater. It also provides access to several businesses that are located close to the river on the north and south ends of the wall system. The street is flooded annually in the spring for 30 to 45 days, restricting any traffic to the northern section of the river frontage. This flooding occurs past the north end of the existing retaining wall, and extends about a thousand feet past the end the levee wall. The proposed extension of the wall, and the raising of the level of the flood plain with fill, would have eliminated this problem every year but two, since 1950.

Page 3. Stillwater, MN/St. Croix River Project

Extensive work on the sewer system in downtown Stillwater was completed in the fall of 1992. The most serious concern, however, is the major sanitary trunk sewer line which services the City. It is located less than 100 feet from the levee wall, and runs parallel to, the wall. Given the content of the soil in that area, the failure of the wall toward the south end of the levee could result in the failure of the pumping system, and the dumping into the river, much of the 1.9 millions gallons of raw sewage that passes through the system each day. The Metropolitan Waste Control Commission and the Minnesota-Wisconsin Boundary Area Commission have expressed their concerns and fears to the City of Stillwater about this pending disaster.

Soil Condition Suspect

The history of Stillwater has a direct bearing on the crisis that now exists. First established as a settlement in 1838, and founded in 1843, Stillwater became the most productive logging and sawmill operation in the upper Midwest, as well as a major commercial and industrial center. By 1874, 3.5 billion board feet of logs had gone through the St. Croix boom, and nine sawmills were in operation in Stillwater along the riverfront. The lumbering industry did not reach it's peak until 1895, when 373 million board feet of lumber were shipped.

It was this vigorous industry, more than century ago, and the nine sawmills that lined the riverbank, that is basis for much of our concern today. Studies by the Army Corps of Engineers stated that, *" . . . . . Subsurface soils investigations along the waterfront in Stillwater identified pieces of glass, wood and/or layers of sawdust to depths of more than 20 feet below the ground surface as remnants of the early logging and sawmill activities."*

Another study by the U.S. Army Corps of Engineers warn that in case of wall failure,

". . . erosion would progress at a very swift rate." The 1986 Feasibility Study by the Corps stated that soil conditions would create an *"unfavorable structural foundation for earthen levees and similar structures."* The report excludes other options by stating that, *"The extent of wood and sawdust precludes the economics of excavating to remove these materials and backfilling with satisfactory soil."*

According to the District Office of the Army Corps of Engineers technical analysis in March, 1992, it was stated that,

> **"There is a strong likelihood that the wall in Stillwater could experience a significant failure within the next two years. Because this whole section of the riverfront property was created by filling during the logging era, soil conditions are suspect. . . .Some areas neighboring this threatened portion of the river have known pockets of sawdust fill. Given these conditions, once the wall failed, erosion would progress at a very swift rate."**

We are fortunate the entire system has not collapsed in the three years since study warned of the pending disaster. The 1993 floods and continuing erosion have created an even greater threat than existed in the 1991 study. Examinations of the structure in 1994 have shown vastly expanded voids in the walls, new cracks have appeared as the walls have shifted, and further deterioration of the area supporting the interstate bridge has become evident.

Page 4. Stillwater, MN/St. Croix River Project

Failure of the Wall System:

The SEH engineering firm concurred with the analysis of the Corps. as to the subsequent result of such a failure. SEH has conducted two studies and on-site inspections of the retaining wall system; the first in 1987, and the second in 1991. The two studies, four years apart, have enabled the engineers to determine the rate of deterioration of the structure. Findings determined by the studies were:

1. The failure of the wall south of the bridge, where both the lower wall and wharf have failed, has resulted in the washout of the soil causing the upper wall to shift forward;

2. While 150 feet of the wall had failed at the time of the 1987 study, more than 50 additional feet has washed out by 1991. It is now estimated that more than half of the wall has collapsed;

3. Sixty to 250 square foot voids were found underneath the slabs. The voids and gaps under the wall system have made the lower wall vulnerable to an even more rapid deterioration of the levee. The six inch concrete slabs which form the wharf, are disintegrating as a result of the soil erosion beneath the structure.

A 1987 assessment of property values by the Federal Emergency Management Agency (FEMA) has established the value of the property at $32 million in the floodplain area. The Corps' Feasibility Study noted that Stillwater is enrolled in the National Flood Insurance Program. Future flooding of the area would prove costly to the federal and state governments, as well as the City. Since the 1987 assessment the City has spent more than $7 million in infrastructure improvements in the downtown area that lies in the floodplain of the St. Croix, and new construction and rehabilitation projects of historic sites are estimated at more than $9 million.

Historical Significance of the Project:

The historic implications of the retaining wall system, and it's solution, are extremely important to the entire State. In recognition of the historical significance of Stillwater as the "Birthplace of Minnesota," the U.S. Army Corps of Engineers conducted an excellent study completed in July, 1985, entitled, "Historical Reconstruction of the Riverfront: Stillwater, Minnesota."

The purpose of the study was to provide the Corps of Engineers with information to be used in the review of options for flood control of the downtown area of Stillwater. The research identified 117 sites in the floodplain as being significant to the entire State. Twenty-three of these sites are listed on the "National Register of Historic Places" by the U.S. Department of Interior. All are threatened by the deterioration and failure of the retaining wall system, and the flooding of the area.

The U.S. Army Corps of Engineers is obligated to protect the cultural or man-made environment, according to their 1985 Study. This obligation is embodied in the National Historic Preservation Act of 1966, and subsequent laws. The study states that these laws set forth federal leadership in locating, inventorying, and protecting such sites. The proposed reconstruction and extension of the retaining wall system does not threaten, damage, or destroy any of the identified historical sites of the area. The project as authorized in P.L.102-580 would provide the protection necessary to preserve these historical structures for future generations.

Page 5. Stillwater, MN/St. Croix River Project

St. Croix River Flood Control Studies and Federal Involvement:

Both the upper and lower St. Croix River has been under almost continuous federal, state, and local government studies since 1954. The U.S. Corps of Engineers completed the "St. Croix River Final Feasibility Report and Environmental Assessment" in July, 1986. The initial study of the St. Croix River basin was started in 1965, suspended in 1968, and restarted in 1982, at the request of the City. A reconnaissance study by the Corps of Engineers was completed in 1983. This was followed by the study by the Corps, "Historical Reconstruction of the Riverfront: Stillwater, Minnesota."

While the feasibility study of 1986, was very thorough in most respects, it failed to address the condition of the retaining wall system and its function in flood control in Stillwater. It did, however, fully address the myriad of issues required in flood control projects such as the environment, physical characteristics of the area, fish and wildlife, an analysis of the river flow, past history of flooding, and many others. Earlier studies directed by Congress and/or conducted by the Corps of Engineers which included the St. Croix River, go back to the beginning of the century. They include studies in practically every decade since 1930.

The St. Croix River at Stillwater, MN is under Federal control and management. The Corps of Engineers also conducts the dredging of the channel in the St. Croix River at Stillwater. Barge traffic, boat construction, commercial passenger traffic, and extensive recreational boating continue to maintain a very active port at Stillwater. It is this very activity that has contributed to the deterioration of the retaining wall system, according to the engineers. The Coast Guard shares responsibility with the States of Wisconsin and Minnesota in patrolling the River.

Action Requested:

Based on the information and data from the "Design Memorandum" prepared by the U.S. Army Corps of Engineers, $2.85 million is needed to complete the first two phases of the construction authorized by Congress in FY 1992, and for which $2.4 million was appropriated in FY 1994. These funds will be used to:

1. Complete the repair of the existing walls when such repair is possible;

2. Complete the replacement of the structure when the deterioration has progressed to such an extent to warrant such action;

3. Extend the system 350 feet to the south, using riprap to prevent the continuing erosion of the area around the south end of the wall;

4. Extend the wall 900 feet north of the existing wall, and raise the area with fill by approximately five feet.

Current plans call for construction to begin in July, 1996, on Phase I of the project. Funds made available under FY 1994 Appropriations Act have provided for the development of plans, specifications, and the design of the project, the "Design Memorandum," environmental studies, and administrative costs, and will permit the repair to begin on the damaged levee wall system. Current funding is insufficient to either complete the necessary repairs, nor construct the extensions of the system to the north and south. The construction of the flood wall will be included in Phase III of the project.

Page 6. Stillwater, MN/St. Croix River Project

As proposed, the project will assure the continued flood protection provided by the existing retaining wall system, eliminate the annual flooding of the emergency access road assuring the year-around availability of fire and rescue services, and provide the critical protection to the sanitary sewer line. It will provide a fifty year flood protection to 130 retail operations, and more than $40 million in property value, provide a knee-wall to serve as a base for emergency sandbagging during extreme flood conditions, thus protecting the property of the City, and the history of the "Birthplace of Minnesota."

We are in compliance with the National Environmental Protection Act, the National Historic Preservation Act (16 U.S.C. 470 (f) and Section 110 (f), 16 U.S.C. 470h-2 (f), the Minnesota State Historic Preservation Office, and have met the special provisions and requirements of Federal and State laws that protect the wild and scenic rivers, and other State and Federal laws that protect the environment and historical sites. We have been working with these agencies over the three years in anticipation of construction and extension of the retaining wall system, and have a summary listing of their letters of support for the project.

For these reasons, we respectfully request that this Subcommittee amend the appropriation for the St. Croix River at Stillwater, Minnesota in the FY 1994 Appropriations Act by increasing the Federal share by $2.85 million. These funds will be used to complete Phases I and II of the project for the repair, construction, and extension of the levee wall system. Thank you for the opportunity to bring this critical matter to your attention through this statement, and we respectfully request the increased appropriation for this project. I will be pleased to respond to any questions you may have.

Jay L. Kimble, Mayor
Stillwater, MN

STILLWATER RETAINING/FLOOD WALLS

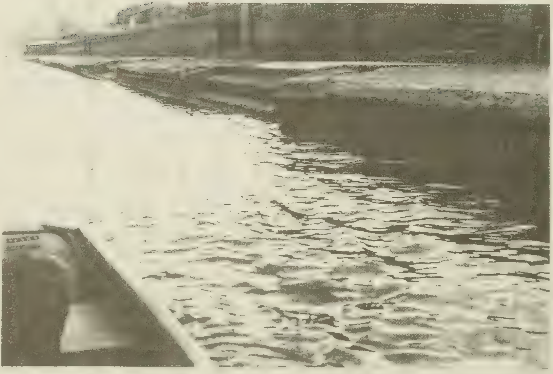
**** TOTAL PROJECT COST SUMMARY ***

PROJECT: STILLWATER RETAINING/FLOOD WALLS
LOCATION: ST. CROIX RIVER AT STILLWATER, MINNESOTA
DATE PREPARED: 7 MARCH 1995

PREPARED BY: JEFF DAVIS, SHORT- ELLIOTT- HENDRICKSON INC.
REVIEWED BY: GLEN BENGTSON, SHORT- ELLIOTT- HENDRICKSON INC.

ACCOUNT NUMBER	ITEM DESCRIPTION	ESTIMATED COST ($) (EPD)	CONTINGENCY AMOUNT ($)	%	TOTAL EST COST (EPD)	OMB INFLATION TO 10/95 %	OMB INFLATION TO 10/95 AMOUNT	MID POINT OF FEATURE	OMB (%) INFLATION (+/-)	INFLATED COST AMOUNT ($)	INFLATED CONTG. AMT. ($)	FULLY FUNDED COST
01 - . -	LANDS AND DAMAGES	1,827,660	273,300	14.95%	2,100,960	1.7%	2,136,676	DEC.,1995	0.80%	$1,873,600	$280,170	$2,153,770
02 - . -	RELOCATIONS	468,986	96,682	20.62%	565,668	1.7%	575,284	DEC., 1996	3.80%	$495,083	$102,062	$597,145
11 - . -	LEVEES AND FLOODWALLS	5,199,300	885,706	17.04%	6,085,006	1.7%	6,188,451	DEC., 1996	3.80%	$5,488,620	$934,992	$6,423,612
13 - . -	PUMPING PLANTS	185,301	37,060	20.00%	222,361	1.7%	226,141	DEC., 1996	3.80%	$195,612	$39,122	$234,735
16 - . -	BANK STABILIZATION	292,358	44,663	15.28%	337,021	1.7%	342,750	DEC., 1996	3.80%	$308,627	$47,148	$355,775
	TOTAL CONSTRUCTION COSTS	7,973,605	1,337,411		9,311,016		9,469,303			$8,361,542	$1,403,494	$9,765,037
30 - . -	PLAN, ENG & DESIGN	998,000	150,200	15.05%	1,148,200	2.5%	1,178,905	DEC., 1996	3.80%	$1,061,822	$159,805	$1,221,627
31 - . -	CONSTRUCTION MANAGEMENT	564,724	75,276	13.33%	640,000	2.5%	656,000	DEC., 1996	3.80%	$600,838	$80,090	$680,928
	TOTAL PROJECT COSTS	9,536,329	1,562,887		11,099,216		11,302,208			$10,024,203	$1,643,389	$11,667,592

NOTES:
1 UNIT PRICES ARE AT APRIL 1995 PRICE LEVELS UNLESS NOTED OTHERWISE.



LOWER WALL AND SLAB FAILURE

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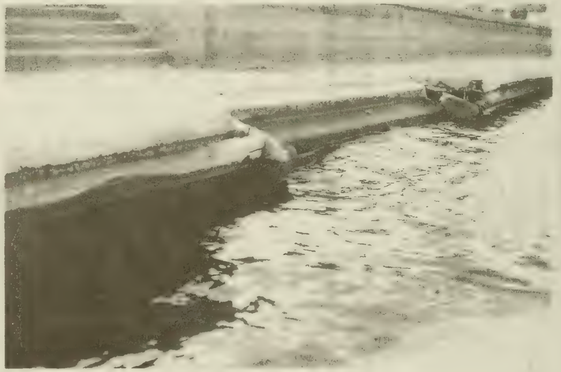

STAIR FAILURE

CITY OF
STILLWATER
MINNESOTA

LOWELL PARK
LEVEE WALL
INSPECTION

SEH
ENGINEERS ARCHITECTS PLANNERS

WEDNESDAY, FEBRUARY 28, 1996.

FIRE ISLAND, NEW YORK

WITNESS

HON. RICK LAZIO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. FRELINGHUYSEN. Congressman Rick Lazio, welcome. Representing the great State of New York, the Empire State.

Mr. LAZIO. Thank you, Chairman. It is wonderful to call you Chairman.

Mr. Bevill, we appreciate your support over the years for our coastal projects and also my thanks to you, Mr. Chairman, for your support in the last Congress.

Mr. BEVILL. We are glad to have you back with us.

Mr. LAZIO. As you both know, my district encompasses a large segment of Long Island's coastline. In the room with me is my friend and colleague Michael Forbes, who has a contiguous district next to mine; and he will elaborate on some of my comments.

The barrier islands along the cost in my district have been hit hard by the higher-than-average number of storms this year. They remain in a fragile state, vulnerable to breaches and overwashes from future storms.

The effects of a devastating storm, similar to the nor'easters of 1992 and 1993, would be the danger posed to Long Island as well as its infrastructure, as I have testified to this panel previously. The barrier islands protect Long Island in the same manner that the levees on the Mississippi protect the residents of the river towns. Similar to many of those river towns, Long Island's middle-class communities, some of which consist of homes only yards from the beach, would be threatened if not for the protection that these barrier islands provide. Not only do these shoreline communities create jobs through tourism, but they are responsible for Long Island's rich commercial and recreational fishing heritage.

The shoreline protection projects administered by the Army Corps of Engineers are important to the livelihoods of many of the residents of my district. From the commercial fishermen to the seaside merchants, it is the engine that drives our local economy, small business; and it relies on the protections afforded by these Army Corps of Engineers projects.

One of the reasons why we have had accelerated erosion problems is the result of some man-made structures that have been erroneously put in place by the Army Corps many years ago, and it is for those reasons that we need some sand replenishment to compensate for some of the man-made problems.

The first project that I request be funded would be to continue to ensure that New York is provided with accurate, real-time information on its coastal processes. Most coastal States already have monitoring systems in place, and such a shoreline monitoring and data collection system is essential for New York.

A federally funded monitoring system was authorized in the 1992 Water Resources Development Act, and I thank Mr. Bevill for his help on that, and appropriations have been made over the past three years to initiate its implementation. As the authorization states, successful implementation requires $1.4 million in Federal dollars for up to 5 years, at which time the State of New York will take over funding the program implementation.

Last year, $1.4 million was included in the Energy and Water Development Appropriations Bill for this program. I am again asking that you include $1.4 million in the fiscal year 1997 Energy and Water Development Appropriations Bill. New York State has agreed to provide their share of funding to this project, so there is local leadership on this as well.

The second project I ask you to consider funding for is the reformulation study of the area from Montauk Point to the Fire Island Inlet. This study will provide valuable long-term information on the coastal processes of Long Island's south shore. It is expected to take nearly 10 years to complete. Over the past 3 years, over half has been appropriated by Congress for the reformulation study, and again I have this subcommittee to thank for that.

In addition to providing vital information for the Army Corps, this will lay the groundwork for possible interim projects needed to reinforce Long Island's coastline. The fiscal year 1997 segment of the study will cost $2.5 million, and I urge you to include this request in the fiscal year 1997 Energy and Water Appropriation Bill.

Another area needing immediate assistance lies between Gilgo Beach and Tobay Beach in the towns of Babylon and Oyster Bay. Every 2 years these beaches receive dredged sand from an authorized biannual dredging project conducted in the Fire Island Inlet by the Corps of Engineers. The Corps is authorized to perform this project, which was last done in September of 1995, every 2 years which is budgeted by the Corps at a cost of about $6 million. However, because of the unusually large number of storms over the past 2 years, an additional $3 million is needed to complete the beach nourishment portion of this project.

These 2 beaches provide the only line of protection for the State's Ocean Parkway, which provides an alternative route to the heavily traveled routes and one of the major commuter roads to New York City. In the interest of preventing damage to the highway, which will inevitably cost the taxpayers more than fixing this problem now, I ask for a total of $9 million to be used for the dredging of Fire Island Inlet and renourishment of Gilgo and Tobay Beaches.

As a member of the Budget Committee, I understand the fiscal constraints you face. I agree that every expenditure must pass stringent economic tests; and I am confident that, upon close examination, funding for these projects will past such tests. All interested parties fully support these authorized projects which have been funded in the past.

The importance of the waterways and the barrier islands to the homes and businesses cannot be overstated. As history as shown, the continued funding of protective measures at this time will save Federal, State and local governments millions of dollars in the longer term. We owe the taxpayers nothing less.

Again, I want to thank the Chairman for this opportunity to explain the importance of these projects and also to you, Mr. Bevill. All of your past help is much, much appreciated.

Mr. FRELINGHUYSEN. Thank you. If you could leave a copy with our staff, we would appreciate it. You move pretty quickly. Thank you.

[The statement of Mr. Lazio follows:]

Testimony of Congressman Rick Lazio
Before the
Subcommittee on Energy and Water Development
February 28, 1996

Thank you, Mr. Chairman and Members of the subcommittee for allowing me the opportunity to testify before you today.

As you know, my district encompasses a large segment of Long Island's Atlantic coastline. Similar to coastal areas in other parts of the country, the barrier islands along the coast in my district have been hit hard by the higher than average number of storms this past year. They remain in a fragile state, vulnerable to breaches and over washes from future storms.

The effects of a devastating storm, similar to the Nor'easters of 1992 and 1993, would be the danger posed to the mainland of Long Island and its multi-billion dollar economy as well as its infrastructure as I have testified to this panel previously. The barrier islands protect Long Island in the same manner that levees on the Mississippi

River protect the residents of the river towns. Similar to many of those river towns, Long Island's middle class communities, some of which consist of homes only yards from the beach, would be threatened if not for the protection that these barrier islands provide. Not only do these shoreline communities create jobs through tourism, but they are also responsible for Long Island's rich commercial and recreational fishing heritage.

The shoreline protection projects administered by the Army Corps of Engineers are critically important to the livelihoods of many residents of my district. From the commercial fishermen to the seaside merchants, it is the engine that drives our local economy, small business, and it relies on the protection afforded by these Army Corps projects.

The first project that I request be funded would continue to ensure New York is provided with accurate, real-time information on its coastal processes. Many coastal states already have monitoring systems in place, and such a shoreline monitoring and data collection system is essential for New York. A federally-funded monitoring system was authorized for New York in the 1992 Water Resources Development Act, and appropriations have been made over the past three years to initiate its implementation. As the authorization states, successful implementation requires $1.4 million in federal dollars for up to five years, at which time the state of New York will take over funding and program implementation. Last year, $1.4 million was included in the Energy and Water Development

Appropriations Bill for this program. I am again asking that you include an appropriation of $1.4 million in the FY 97 Energy and Water Development Appropriations Bill. New York state has also agreed to provide their share of funding for this project.

The second project I ask you to consider funding is the reformulation study of the area from Montauk Point to the Fire Island Inlet. This study will provide valuable long-term information on the coastal processes of Long Island’s south shore.

It is expected to take approximately 10 years to complete. Over the past three fiscal years, over half has been appropriated by Congress for the reformulation study. In addition to providing vital information for the Army Corps of Engineers, this study will lay the groundwork for possible interim projects needed to reinforce Long Island's coastline. The FY 97 segment of the study will cost $2.5 million and I urge you to include this request in the FY 97 Energy and Water Appropriations Bill.

Another area needing immediate assistance lies between Gilgo Beach and Tobay Beach in the towns of Babylon and Oyster Bay. Every two years these beaches receive dredged sand from an authorized biannual dredging project conducted in the Fire Island Inlet by the Corps of Engineers. The Corps is authorized to perform this project, which was last done in September of 1995, every two years which is budgeted by the Corps at a cost of $6 million. However, because of the unusually large number of storms over the past two years, an additional $3 million is needed to complete the beach nourishment component of this project. Importantly, these two beaches provide the only line of protection for the state's Ocean Parkway, which runs along the south shore of Long Island and provides an alternative route to the heavily traveled roads of the mainland. In the interest of preventing damage to the highway, which will inevitably cost more to the taxpayers than fixing this problem now, I ask for a total of $9 million to be used for the dredging of Fire Island Inlet and the nourishment of Gilgo and Tobay beaches.

As a member of the Budget Committee, I understand the fiscal constraints you face. I fully agree that every expenditure must pass stringent economic tests, and I am confident that, upon close examination, funding for these projects will pass such tests. All interested parties fully support these authorized projects which have been funded in the past. The importance of the waterways and the barrier islands to homes and businesses on Long Island cannot be overstated. As history has shown, the continued funding of protective measures at this time, will save federal, state and local governments millions of dollars in the long-term. We owe the taxpayers nothing less.

Again, thank you for this opportunity to explain the importance of these projects. Your consideration of them is greatly appreciated. I will be happy to provide you, or your staff, with any additional information you may need.

Wednesday, February 28, 1996.

HAMBURG, IOWA, FLOOD CONTROL PROJECT

WITNESS

HON. GREG GANSKE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF IOWA

Mr. Frelinghuysen. Congressman Ganske from Iowa. You have some good charts for this afternoon. These are not as colorful as some that we have seen today.

Mr. Ganske. I ask permission to have this information submitted.

Mr. Frelinghuysen. Without objection, they will be included.

Mr. Ganske. If I may speak without the microphone, some of the information you receive I am sure must be mind numbing at times, so what I would like to do is for a few minutes——

Mr. Frelinghuysen. If you could turn the mike up a little bit.

Mr. Ganske. I would like to paint a picture for you about a small town in my district in the southwest corner of the State of Iowa. It is right at the junction of the Missouri and Nishnabotna Rivers. The name of the town is Hamburg. And possibly to help you remember this, here is the town of Hamburg (pointing to map); the Nishnabotna River comes down like this (pointing) and the Missouri River comes across. And the Town of Hamburg sits right at the base of the bluffs of the hills on the east side of the Missouri River floodplain.

The Missouri River floodplain is 10 miles wide or so. Over the years what has happened is that the banks of the Missouri are higher than the land at the base of the bluffs, so that instead of draining into the Missouri, the water pools along the base of these hills, which are right there (pointing).

In the 1920s, the Corps developed a drainage ditch that drains south down to the Nishnabotna and Missouri Rivers, and consequently, when you have wet seasons—and they have had flooding in this area 11 times, severe flooding 11 times in the last 30 years, including a very severe flood in 1993—then the water, instead of draining to the Missouri, goes over to the hills, comes down and floods this town.

And in this town right here (pointing), for instance, we have Vogel Popcorn, which is the largest popcorn manufacturer in Iowa. It provides 95 percent of all the popcorn in movie theaters west of the Mississippi River.

Mr. Frelinghuysen. The record will definitely show that.

Mr. Ganske. Right about here (pointing), we have a huge John Deere implement dealership and just a little bit further down here we have a large ethanol plant. This is a town of about 1,300 people. Combining those three major manufacturers, you have taken care of the employment for a large area in this county—in fact, southwest Iowa.

All three of those places of employment have indicated that if they are flooded one more time, they are moving out; and so what we would like to facilitate—and we have a problem with this because of the lack of funding in section 205 monies—is your help in any way possible to complete a levee.

We have a railroad line that goes along here (pointing) and that can be used then as part of the levee, and not much needs to be done. So we are incorporating that. Here is the drainage ditch, and we need a levee here (pointing) to complete the levees around this town and protect it from further flooding. This would significantly help this community.

The community has raised two-thirds of the matching money. We are not talking about a large amount of money in the scheme of billions that we are dealing with. This is about a million-dollar project; the Federal Government's share would be about $800,000. The community is already committed to two-thirds of that. They can easily raise the rest. And in terms of the cost-benefit analysis—the Army Corps of Engineers analysis has been very, very positive for cost-benefit analysis in the past. I would just ask for your consideration for this project.

Mr. FRELINGHUYSEN. Thank you for your testimony and we will do our level best to be of help to you.

Mr. GANSKE. If you are ever eating popcorn west of the Mississippi, maybe you will think of this.

Mr. BEVILL. We certainly don't want anything to happen to that popcorn.

Mr. GANSKE. We appreciate it. Thank you.

[The statement of Mr. Ganske follows:]

GREG GANSKE
4TH DISTRICT, IOWA

COMMERCE COMMITTEE
SUBCOMMITTEES
HEALTH AND ENVIRONMENT
COMMERCE, TRADE, AND HAZARDOUS MATERIALS

CONGRESS OF THE UNITED STATES
HOUSE OF REPRESENTATIVES

Statement of the Honorable Greg Ganske
before the
Subcommittee on Energy and Water Development

Mr. Chairman, Subcommittee members, I appreciate the opportunity to testify before you today I know that you have heard from a number of members this afternoon, so I will keep my remarks sort.

Mr. Chairman, the devastating floods that hit the Midwest in 1993 have shown all too clearly what can happen without proper flood control measures I represent Southwest Iowa. During the spring, this is one of the wettest regions of the country. Hamburg which is located in Fremont County, lies between the Missouri and Nishnabotna river and is particularly vulnerable to flooding. In fact, in information provided to me by the Corps. flooding has occurred here in 1949, 1951, 1952, 1960, 1961, 1962, 1965, 1967, 1984, 1987, and 1983

Of particular concern is the flooding that has occurred along Main Ditch #6. This ditch is a drainage that was built in the 1920's to aid in flood control. Unfortunately, when the Missouri and Nishnabotna rivers run high, water backs up in Main Ditch #6 and floods the community. In 1993 over half of the 1,248 residents were forced to evacuate due to the flooding In the fall of 1993, the Omaha District, fearing continued flooding in 1994 proposed a levee be built immediately using Advanced Measures Authority near Main Ditch #6 to protect the town The bureaucracy in Washington overruled this decision but did approve the beginning of a flood control project utilizing Section 205 Authority

Currently, the Feasibility and Design study is 95% complete. Unfortunately, a severe shortage of Sec 205 monies has halted progress. The Omaha District estimates the project will need an additional $800,000 in order to complete the plans and construction. The local community has already raised 2/3 of the local cost share and is more than capable of raising the remaining amount once the federal government can make good on its commitment. I have included a complete breakdown of project costs according to the Omaha District office.

Flooding has cost the town over $20 million in 1993. The bulk of Hamburg's employment base, Manildra Energy, which operates an ethanol plant, Vogel Popcorn Company, and a John Deere implement dealer all located near town have indicated they will likely move, rather than rebuild should their facilities be flooded again. Simply put, the completion of this project is my number one priority to the people of Southwest Iowa.

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40 PEARL STREET
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(712) 323-55[illegible]

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The City of Hamburg
Office In City Hall
HAMBURG, IOWA 51640

December 18, 1995

Congressman Greg Ganske
1108 Longworth House Office Building
Washington, D.C. 20515

Dear Congressman Ganske:

We have received word concerning the severe budget cuts in the Energy and Water Development Appropriations Act.

We are especially concerned about the drastic cuts in the Section 205. Hamburg is nearing completion of a Feasibility Study and is ready to move into plans and spec's for a Section 205 Levee Project on West Ditch No. 6. The project is slated for construction during the 1996 construction season.

This project is of utmost importance to us as this ditch is what caused the major flooding during the Flood of 1993.

It is our understanding that work on our project will not continue into the next stage because of unsufficient funding and Congressional add-ons in the Section 205.

We would appreciate any assistance you can give us in assuring that our project is funded and we can complete what we set out to do years ago; and that is assuring our citizens and business community of flood protection from the West Ditch. Without this project the future of Hamburg is uncertain.

By Order of the City Council
Henry Martin
Henry Martin
Mayor

NISHNABOTNA RIVER AND MAIN DITCH NO. 6
HAMBURG, IOWA

DIVISION OF PLAN RESPONSIBILITIES

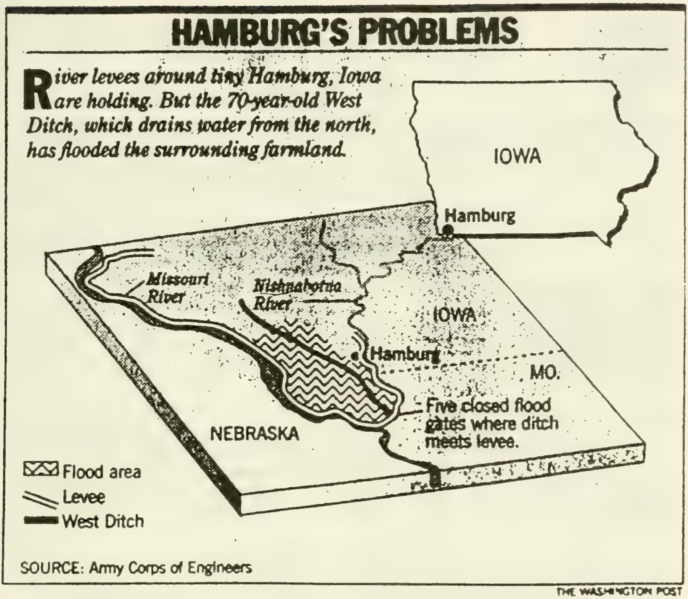
Responsibilities for plan implementation will be shared by the Corps of Engineers and the local sponsor. The Corps of Engineers will design the project and administer the construction contracts The local sponsor will provide the Local Cooperation Requirements stated in the previous section

Table contains an apportionment of project costs between the Federal Government and the non-Federal sponsor, based on the cost-sharing provisions discussed above

Table
Apportionment of Project costs
Federal and Non-Federal Responsibilities

Item	Cost
Federal Costs	
Construction	$521,950
Engineering and Design	177,870
Supervision and Administration	62,700
Total federal costs (75 percent)	$762,520
Non-federal Costs	
5-percent Cash Payment	$ 50,840
Lands, Easements, ROW	160,000
Additional Cash	43,340
Total Non-Federal Costs (25 percent)	$254,180
Total Project Costs	$1.016,700

Using the Baseline Cost Estimate, the sponsor's share for costs allocated for flood control includes: $160,000 for LERRD; and a cash contribution of $94,180 The sponsor's total share for construction would therefore be $254,180, which is 25 percent of the total project construction cost



HAMBURG'S PROBLEMS

River levees around tiny Hamburg, Iowa are holding. But the 70-year-old West Ditch, which drains water from the north, has flooded the surrounding farmland.

SOURCE: Army Corps of Engineers

THE WASHINGTON POST

OFFICE OF THE GOVERNOR
STATE CAPITOL
DES MOINES, IOWA 50319
515 281-5211

TERRY E BRANSTAD
GOVERNOR

November 9, 1993

Col. Michael S. Meuleners
District Commander
U.S. Army Corps of Engineers
Omaha District
215 North 17th Street
Omaha, Nebraska 68102-4978

Dear Colonel Meuleners:

I am contacting you concerning an issue of great concern near the Southwest Iowa, Fremont County, town of Hamburg. As you are aware, this area has been repeatedly flooded since 1987 and years prior. During the floods of 1993, Hamburg again experienced significant damages to businesses, homes, and surrounding agricultural land.

Federal and State officials have advised me there is a high potential that the Hamburg area will be severely impacted again in the Spring of 1994. Officials advise that existing high soil moisture values and river levels equate to a good possibility of more flooding. Further, an early hard freeze combined with heavier than normal snowfall increases the likelihood of spring flooding; and that if the above conditions are followed by a rapid thaw, the potential for flooding becomes imminent. Forecasts from the National Oceanic and Atmospheric Administration show there is a high potential for these conditions to exist.

I am aware of the Corps' ongoing effort to install a permanent pumping facility on Main Ditch No. 6, as well as a levee along the west edge of Hamburg, for the purpose of controlling flood waters. Further, I am advised that these permanent measures will not be in place in time for next year's flood season.

With the high potential for Main Ditch No. 6 flooding in Hamburg this spring and the fact that permanent flood control will not be completed, I request the Corp of Engineers to implement an Advance Measures Project under the authority of Public Law 84-99 as amended. Specifically, I request the Corps to implement a short-term solution that would provide protection to Hamburg from Main

Ditch No. 6 flooding. Please consider the construction of a temporary levee along the north and west edge of the city to provide temporary protection from left-bank flooding from Main Ditch No. 6, as well as the possibility of placing large portable pumps at the downstream end of the ditch.

Given that time is rapidly running out for the implementation of protective measures at Hamburg, I feel it is imperative that the Corps approve and execute advance measures immediately.

The State of Iowa is working diligently to prepare for the probably flooding of next spring. State officials will be prepositioning resources at key locations in anticipation of future events. We have engaged extensive efforts to mitigate the damages that may occur. However, the recovery from the "Flood of 93" has stretched State resources beyond our existing capabilities.

It is the State of Iowa's goal to protect lives and property of the citizens of Iowa, as well as prevent damages to the millions of dollars of investment state and local governments have made in the infrastructure for communities such as Hamburg. Through a partnership between federal, state and local governments and private enterprise, I believe a workable solution to the ease the problems in Hamburg can be accomplished prior to the next flooding season.

Sincerely,
Terry E. Branstad
Terry E. Branstad
Governor

TEB/dlm
attachments

WEDNESDAY, FEBRUARY 28, 1996.

LONG ISLAND PROJECTS

WITNESS

HON. MICHAEL P. FORBES, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. FRELINGHUYSEN. Mike Forbes from New York, we are pleased to recognize you.

Mr. FORBES. Thank you, Mr. Chairman. I appreciate this opportunity; and to Mr. Bevill, I thank you for your leadership over the years on many of these issues of mutual interest.

Mr. BEVILL. Thank you, Mike. It is good to have you back with us.

Mr. FORBES. Members of the committee, I appear today before the Appropriations Subcommittee on Energy and Water Development to seek funding for several United States Army Corps of Engineers projects that are of great ecological and economic importance to eastern Long Island—in fact to all of Long Island, home to some of the most beautiful beaches in the world—I would say world-class beaches.

Long Island has a strong history of working with the Army Corps on projects to protect our shores. As was earlier stated by my friend and colleague, Mr. Lazio, we do have a unique situation on Long Island in the sense that the barrier beach really serves to mitigate the forces of nature, the tremendous ebb and flow and currents of the tumultuous ocean, and, really, on Long Island is a very important breakwater system, if you will.

The Army Corps has always been of great service in repairing, rebuilding, and sometimes even preventing damage to our coastline.

Growing up on eastern Long Island, I have long enjoyed the beauty of our beaches. They contribute heavily to our local economy, creating jobs and maintaining one of our key industries: tourism. Unfortunately, the ravages of nature have taken their toll on our fragile beaches, even more so in recent years. Storms, hurricanes, and the regular battering of the tides have gradually eroded our once wide stretches of beach, and we have a unique situation with the barrier beach serving as a breakwater system.

The situation is quickly nearing crisis proportions, I would suggest to the committee, and plans must be devised and construction done to protect the integrity of our shoreline and protect the property and welfare of residents on Long Island.

The miles of shoreline on Long Island indicate that numerous Army Corps of Engineers projects are underway or in the preliminary planning stages, and we are mindful that there is need for Federal assistance now more than ever. Every year new projects are introduced to further protect the communities and beaches of Long Island, and I have provided the committee a map to show where these projects are located.

Projects on Long Island are routinely prioritized to ensure that the problems in the areas of greatest concern are worked on first. The projects and programs I have outlined are of the highest priority for fiscal year 1997, and I respectfully request support from the committee to full-fund these crucial projects.

And if I may Mr. Chairman, I would like first of all to take a moment to comment on a vital program undertaken by the Army Corps of Engineers, and that is the Continuing Authorities Program, the CAP program. The administration does not necessarily hold it in the same high priority that I think some members of the committee do, and I thank the committee, frankly, both Democrats and Republicans, for stepping forward and saving the Continuing Authorities Program.

I look at it more like a rapid-response team. It gives the Army Corps the flexibility to react to emergencies, and we have had many of them on Long Island. The Continuing Authorities Program refers to six separate accounts in the Army Corps budget that fund projects not specifically authorized by the Congress, but granted support by the Congress.

As you know, this program allows the Corps to remain involved in local protection projects throughout the Nation. The match rate for localities under this program is slightly lower, which allows many smaller communities to not only determine their fair share, but also it allows them to undertake projects that may not have otherwise been feasible. I do urge the committee to again support the Continuing Authorities Program.

There was a decrease in Continuing Authorities Program funds last year. It showed that obviously there was some concern to being fiscally prudent, but also I think we must have the ability to continue to plan, engineer, and design projects that have been on the drawing boards before the Army Corps of Engineers, particularly as we move into fiscal year 1997.

The Continuing Authorities Program and the reducing funding, unfortunately found that a project near and dear to my heart and to one of my smallest communities, that of Shelter Island, Long Island, was put on the back burner. The project is known as the Ram Island Causeway Project on Long Island. As I said, it was something that was of high priority to the Army Corps, but as there are so many programs of high priority and because of the reduced funding, they were not able to go forward with that program. I am hopeful that the committee would specifically include language in their report asking that the Army Corps fulfill what it internally has requested, and that is going forward with the Army Corps program.

The reformulation study from Fire Island Inlet to Montauk that was alluded to by my friend and colleague, Mr. Lazio, is obviously one of great importance. It will help us move forward in a very proactive way. It will actually save the taxpayers, I believe, when it is fully—the multiyear research and analysis of the situation on the South Shore of Long Island—I think it will ultimately save literally tens of millions of dollars for the taxpayers and will provide a proactive program to move forward.

I remember well as a resident of the Westhampton Beach area that what was initially a beach on Dune Road, which would have been filled for less than a million dollars, turned into a $8 million project because the mechanism that the Army Corps of Engineers utilized didn't allow for a rapid response to that kind of emergency situation. I commend the Clinton administration for approving an emergency response plan which will now allow the Corps to move on these kinds of projects where a breach occurs and they must fill it, if for no other reason than for saving the taxpayers literally millions of dollars.

The Ram Island Causeway, as I said, is a project of greater importance, and we were able in 1995 to line up State and local support for the project; unfortunately, because it was moved to the back burner, we were not able to get Federal funding for that, and I am hopeful that if we go after the local and State money again, we might have the committee's support in moving forward on it.

The South Shore monitoring, which is obviously very important—Congressman Lazio mentioned that as well—funding level is at 1.4 million.

Another project that I would like to bring to your attention is the Long Island South Shore back bays. This year Congressman Lazio and I will be working on language to allow the Army Corps to initiate and complete reconnaissance study to determine if construction or maintenance of Federal projects within the embankments along the South Shore of Long Island has caused or added to the degradation of the bays' ecosystems and to identify appropriate measures to restore the ecosystems, including their habitats, water quality, and related environmental features.

The Army Corps has been working closely with us and the community on Long Island over the last five decades, and I strongly support looking into the impacts to make sure that taxpayer money which is invested in these projects is well placed and is resulting in a net plus for the people of this Nation, frankly.

In these tough budgetary times, I certainly understand that there are many fiscal constraints upon the committee. Frankly, these programs provided by the Army Corps, I believe get to the heart of an appropriate role for government, and that is, it is more than what some people might categorize, particularly if you come from a place like I do, which is more noted for being the Hamptons than Brookhaven Town or Smithtown.

This is not about saving the homes of rich people. This is really about middle-class families who would be flooded out of their homes, frankly, if we didn't have these protections on the South Shore of Long Island, if we did not protect the Fire Island-Dune Road area and provide for these many worthwhile projects that have been supported by Democrats and Republicans, certainly for the last four or five decades.

I thank the committee for their past support and urge your favorable consideration of these proposals.

Mr. FRELINGHUYSEN. Thank you Congressman Forbes for your testimony. We will be working with you, I know in future months. Thank you very much.

[The statement of Mr. Forbes follows:]

MICHAEL P FORBES
1st District New York

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The Honorable Michael P. Forbes
1st District, New York
House Committee on Appropriations
Subcommittee on Energy and Water Development
Testimony on FY1997 Appropriations Bill
February 28, 1996

Mr. Chairman, I appear today before the Appropriations Subcommittee on Energy and Water Development to seek funding for several United States Army Corps projects that are of great ecological and economic importance to Eastern Long Island.

Home to some of the most beautiful beaches in the world, Long Island has a strong history of working with the Army Corps on projects to protect our shores The Army Corps has always been of great service in repairing, rebuilding, and sometimes even preventing damage to our coastline.

Growing up on Eastern Long Island I have enjoyed the beauty of our beaches which contribute heavily to the local economy, creating jobs and maintaining our vital tourist industry Unfortunately, the ravages of nature have taken their toll on our fragile beaches. Storms, hurricanes, and the regular battering of the tides have gradually eroded our once-wide stretches of beach. The situation is quickly nearing crisis proportions, and plans must be devised and construction done to protect the integrity of our shores.

The miles of shoreline on Long Island indicate that numerous Army Corps projects are underway or in the preliminary planning stages Every year new projects are introduced to further protect the communities and beaches of Long Island A map of these projects is attached for your perusal.

Projects on Long Island are routinely prioritized to ensure problems in the areas of greatest concern are worked on first. The projects and programs listed below are of the highest priority for FY1997 and I respectfully request that the committee fully funds these crucial projects

I would also like to reiterate my strong support for the **Continuing Authorities Program (CAP)**. Last year this program was dramatically reduced and it my understanding that the Administration wants to phase out this program all together.

The CAP refers to six separate accounts in the Army Corps' budget that funds projects not specifically authorized by Congress. As you know, this program allows the Corps to remain involved in local protection projects throughout the Nation. The match rate for localities under this program is much lower, which allows many small communities to undertake projects previously not

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feasible. I urge the committee to once again support this program.

The decrease of CAP funds last year showed a lack of support for this program and hindered the Army Corps ability to follow the conferees request that they continuing the planning, engineering and design of projects under all of the CAP whether or not they were funded in FY1996. It also prevented the Army Corps from moving forward with many projects across the Nation such as the Ram Island Causeway project on Long Island.

I commend last years conferees for inserting language showing their support for the CAP. Appropriating adequate funds for this program in FY1997 will show the Army Corps Congress's commitment to the program.

The Continuing Authorities Programs are of great value and require only modest budgetary resources. I urge you to increase funding for this program in FY1997.

The Reformulation Study of the Area from Fire Island Inlet to Montauk Point - Westhampton Interim Project Construction: The reformulation study is a long term project essential for protecting the barrier island that shelters the southern coast of Long Island from the pounding of the Atlantic Ocean. It will provide valuable information on the coastal processes of Long Island's south shore. This study also authorizes and provides funds for several crucial interim projects including construction on the Westhampton beach project. Last year $10.58 million was appropriated for continuing reformulation, interims and construction for beach erosion and hurricane protection.

In 1992 there was a small breach at Westhampton beach that was left unattended and resulted in a significant break that destroyed homes and required millions of dollars to repair. The Army Corps studied Westhampton beach and devised a construction plan to protect Westhampton beach from further erosion and hurricane damage. It is essential to get protective measures such as the Westhampton construction plan in place promptly to protect against any more damage. The Army Corps has already invested a large amount of money into this project and it would be a waste of resources not to complete the project. *The funding level in FY1997 to continue construction at Westhampton beach is $11.4 million.*

Shelter Island/Ram Island Causeway: In December 1992 a northeaster rendered Ram Island Drive impassable due to overtopping and washovers from Gardiners Bay. Subsequently, large sections of the road were washed away due to storm-induced erosion. Emergency measures taken by the Town of Shelter Island to repair the road and hopefully prevent its failure were inadequate and this road has once again washed away with the 1996 storms.

The Army Corp has devised a plan to rebuild the road in a manner that will prevent its washing out from future storms. This year state and local partners came to the table with their portion of the funding for this project. Unfortunately, due to funding constraints within Section 103 of the River and Harbor Act of 1962, the Army Corps was not able to fund the project this year, so the road remains in shambles.

The Ram Island Causeway is the only road into and out of the Ram Island area. The repeated washing out of this major thoroughfare is hazardous to the residents of this community and must be fixed. The Army Corps has already contributed so much to this project, and to abandon it now would not only be a significant waste of resources, but may needlessly endanger the people of Ram Island. *The funding level to do this project is $650,000.*

South Shore Monitoring. This project is designed to provide New York with accurate information on its coastal processes. Numerous states have monitoring systems in place and it is important that New York have a similar system to better understand the impact the ocean is having on our coasts and the potential economic impact. This project was designed, among other things, to develop a database for easy storage and dissemination of information to the public, collect wave data from a network of nearshore and deep water wave gauges, and collect spring and fall aerial photography of the entire south shore.

In FY1994-95 $1.4 million was appropriated for this project and last year another $1.4 million was appropriated. The authorization on this project is for five years after which the State of New York will take over funding and program implementation. Congressman Lazio from the 2nd District of New York also strongly supports this program. *The funding level to continue work on this project is $1.4 million.*

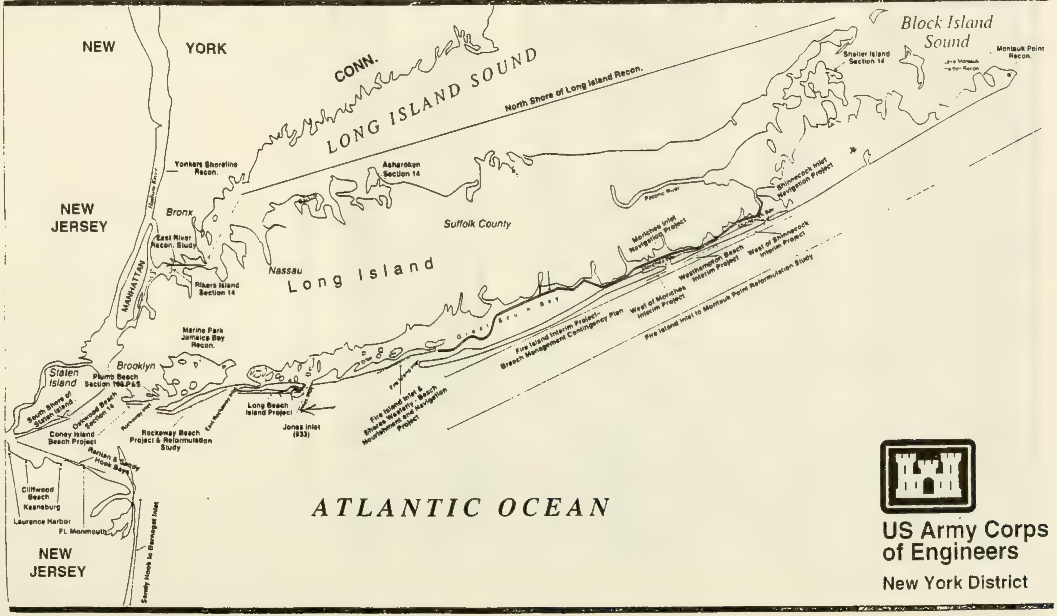
Another project I would like to bring to your attention is the Long Island's South Shore Back Bays. This year Congressman Lazio and I will be working on language to allow the Army Corps to initiate and complete a reconnaissance study to determine if construction or maintenance of Federal projects within the embayments along the southshore of Long Island have caused or added to the degradation of the bay's ecosystems and to identify appropriate measures to restore that ecosystem, including its habitats, water quality, and related environmental features. The Army Corps has been working on Long Island for over five decades and I strongly support them looking at the impacts their projects have had on Long Islands delicate ecosystems. It is not certain whether this project will need funding this year, but I wanted to bring it to your attention.

In these tough budgetary times I understand the fiscal constraints placed on you as members of the Appropriations Subcommittee on Energy and Water Development, however, the projects outlined above are desperately needed on Long Island to ensure the safety and economic well being of many communities on Long Island.

The cost-effectiveness of investment in coastal protection is easily measured by the breach at Westhampton in 1992. If fixed immediately this breach would have cost a couple thousand dollars, but the delay in repair is costing taxpayers millions of dollars in property damage and construction costs. Only a comprehensive and proactive coastal policy will guarantee that our children and grandchildren can enjoy the same beaches that we have had the privilege to enjoy.

Thank you for letting me testify about these important projects on behalf of the residents of Long Island. Your consideration of them is much appreciated and I will be happy to provide you, or your staff, with any additional information you may find necessary.

SHORELINE PROTECTION PROJECTS IN NEW YORK DISTRICT


NEW
YORK
CONN.
LONG ISLAND SOUND
Block Island Sound
NEW JERSEY
Bronx
MANHATTAN
Hudson River
Brooklyn
Staten Island
Nassau
Long Island
Suffolk County
Peconic River
Great South Bay
Moriches Bay
Shinnecock Bay
ATLANTIC OCEAN
NEW JERSEY
North Shore of Long Island Recon.
Yonkers Shoreline Recon.
East River Recon. Study
Rikers Island Section 14
Asharoken Section 14
Shelter Island Section 14
Montauk Point Recon.
Marine Park Jamaica Bay Recon.
Plumb Beach Section 103 P&S
South Shore of Staten Island
Oakwood Beach Section 14
Coney Island Beach Project
Rockaway Inlet
Rockaway Beach Project & Reformulation Study
East Rockaway Inlet
Long Beach Island Project
Jones Inlet (933)
Fire Island Inlet
Fire Island Inlet & Shores Westerly - Beach Nourishment and Navigation Project
Fire Island Interim Project–Breach Management Contingency Plan
West of Moriches Interim Project
Moriches Inlet Navigation Project
Westhampton Beach Interim Project
West of Shinnecock Interim Project
Shinnecock Inlet Navigation Project
Fire Island Inlet to Montauk Point Reformulation Study
Raritan & Sandy Hook Bays
Cliffwood Beach
Keansburg
Laurence Harbor
Ft. Monmouth
Sandy Hook to Barnegat Inlet

US Army Corps
of Engineers
New York District

WEDNESDAY, FEBRUARY 28, 1996.

SOUTH SHORE OF STATEN ISLAND

WITNESS

HON. SUSAN MOLINARI, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. FRELINGHUYSEN. The committee welcomes Congresswoman Susan Molinari.

Ms. MOLINARI. Thank you, Mr. Chairman. I will be very brief.

Let me just say that this is a bittersweet occasion for those of us who have come to enjoy and respect working with Mr. Bevill and certainly the fact that this will be the last time, in an official capacity, that we will be testifying before you as a Ranking Member, I just want to salute you for all the work you have done on behalf of all the Members.

Mr. BEVILL. I am convinced we are going to make progress right along with our good Chairman, here.

Ms. MOLINARI. I am sure. And thank you for all the years of service you have provided this body.

Mr. Chairman, let me thank you for all the assistance you have provided to us in the areas between New York and New Jersey relative to the first serious movement that we have seen in the Ports of New York and New Jersey relative to intermodal transportation and in particular in shipping. I want to thank you for that.

I request that my entire statement be entered for the record, and I am just going to go briefly over three major projects unique to my district and then give you a list of those that you are probably even more familiar with than I am because it affects both New York and New Jersey.

Number one is Howland Hook Marine Terminal. It is perhaps the single most important economic issue affecting my district on the north shore of Staten Island. We are at the point where we are ready to complete the modernization and maintenance dredging. It is my understanding that a million dollars is required to complete the general reevaluation report and begin construction on this project by fiscal year 1999.

The Howland Hook, which is the result of the generosity of this committee last year, is set to open this July after being stagnant for many, many years; and now, as you know, we are all looking in the general port for further deepening so that we can continue to remain competitive. It creates about a thousand jobs immediately, but our real concern is that we don't continue to lose shipping business to Canada. And so this is very valuable.

The other two are unique to Staten Island are very important, one long term and one short term. Following up on Congressman Forbes' and Congressman Lazio's concern, one project is the South Shore of Staten Island Hurricane Protection plan. It is a long-term project designed to protect thousands of families residing on the South Shore of Staten Island where the winter's nor'easters have severely eroded our beaches and reached into people's homes. $300,000 is required for the upcoming fiscal year to perform the engineering and economic analysis as well, as the environmental impact investigations, to proceed on the long-term protection.

Short-term protection: A neighborhood that has been hit by this is the Oakwood Beach area in Staten Island and the Oakwood Beach Shore Protection project would provide immediate protection. The Federal hook is that it is jeopardizing a local sewage treatment plant that is federally funded and is about to be flooded out, which, needless to say, from a environmental and aesthetic standpoint, would not be a good thing.

Pending the development of current 1996 final engineering plans, the project will be ready to start construction by next year. Therefore I request $400,000 which I believe is available within Section 103 of the continuing authorization project to continue this program.

If you look at my testimony, Mr. Chairman, you will see that there are other additional requests for money that deal with New York Harbor collection and removal of drift, operation and maintenance appropriations for the channel serving New York and New Jersey and the general reevaluation for the Kill Van Cull-Newark Bay Channel. With these three areas, you are just as familiar, if not more familiar, than I am, and any consideration that you can give to these community needs would be appreciated.

Mr. FRELINGHUYSEN. The committee will look forward to dealing not only with Staten Island's general needs but the general needs of the New York-New Jersey area.

Ms. MOLINARI. It looks like we are finally making progress on dredging as a tri-State effort.

Mr. FRELINGHUYSEN. We are represented here, talking about what a crisis it is. You have been a leader in many of these issues long, long before I got down here; and I want to give you credit for speaking up.

Ms. MOLINARI. Thank you, it is nice to have you here to take most of the burden.

Mr. FRELINGHUYSEN. It is helpful that Mr. Bevill is here and Mr. Myers is here to run the committee. They help us.

Ms. MOLINARI. Absolutely. No doubt about it. Thank you for your time and consideration.

[The statement of Ms. Molinari follows:]

TESTIMONY OF
CONGRESSWOMAN SUSAN MOLINARI
BEFORE THE
SUBCOMMITTEE ON ENERGY AND WATER APPROPRIATIONS
Wednesday, February 28, 1996

Mr. Chairman, Members of the Committee, thank you for the opportunity to testify before you today regarding issues which are crucially important to the economic and environmental health of New York harbor. Given the time constraints, I want to briefly mention a few essential navigation and Corps. of Engineer projects which are vitally important to my constituents and which I strongly urge full federal funding in Fiscal Year 1997.

Howland Hook Marine Terminal

Perhaps the single most important economic issue to my constituents on the north shore of Staten Island is to modernize and complete the maintenance dredging requirements for the Howland Hook Marine Terminal. This year, it is my understanding that $1 million is required to complete the General Re-Evaluation Report and begin construction on this project by FY 1999.

As I have testified in the past, this facility is expected to create well over 1,000 jobs in New York and New Jersey. Perhaps more importantly though, the completion of this project will ensure that the United States does not continue to lose more shipping business to Canadian shipping competitors to our north. In fact, the key to the future growth and competitive viability of the Port of New York is the Howland Hook Terminal since it is the only intermodal terminal in New York harbor with expansion capabilities.

Hurricane Protection projects - South Shore Hurricane Protection & Oakwood Beach

Two other critical projects in my congressional district deal with long and short-term Army Corps. of Engineers' hurricane protection projects. The South Shore of Staten Island Hurricane Protection Plan is a project designed to protect thousands of families residing in the South Shore community of Staten Island from severe flooding and weather related disasters. According to the Army Corps. of Engineers, $300,000 is required for the upcoming fiscal year to perform engineering and economic analysis as well as environmental impact investigations, in order to provide long-term protection for over 50 years.

The Oakwood Beach Shore Protection project would provide immediate protection for the local sewer treatment plant and the adjacent environment on Staten Island. Pending the development of current 1996 final engineering plans, this project will be ready to start construction by next year. Therefore I request $400,000 within Section 103 of the Continuing Authorization Program to continue this program.

Other items which I believe this committee should also fully fund include:

- $750,000 to complete the General Re-evaluation Report for the Kill Van Kull and Newark Bay Channels to be dredged to 45 feet. This channel serves all the shippers whose destination are the container ports at Howland Hook on Staten Island, as well as those lines going to Port Newark and Elizabeth Marine Terminal.

- $36.7 million in operation and maintenance appropriations for the federal channels serving commercial interests in New York and New Jersey. This includes funding for dredging and disposing of the millions of cubic yards of contaminated sediments which are piling up throughout New York Harbor and specifically at the Arthur Kill and Bay Ridge/Red Hook channels bordering my district.

- $100,000 in construction for the New York Harbor Collection and Removal of Drift - which would include funding to continue the engineering and design of Shooters Island, Kill Van Kull, and Arthur Kill, NY reaches.

In conclusion, Mr. Chairman, let me mention that I continue to oppose efforts by the administration to adjust cost-sharing requirements or federal participation of beach replenishment projects, flood control projects, and small harbor navigational dredging projects. I agree with this Committee's strong support of these very important issues.

Let me again thank the Members of this committee for the opportunity to testify about these important funding requests, and I ask you to carefully consider these proposals as you move forward.

Congresswoman Susan Molinari
Projects Important to New York Harbor
Energy and Water Appropriations
Fiscal Year 1997

Studies	Request
Arthur Kill Channel, Howland Hook Marine	$1,000,000
South Shore of Staten Island Hurricane Protection Plan	$ 300,000
Oakwood Beach (Sec. 103 of Continuing Authorization	$ 400,000
Construction	
Kill Van Kull and Newark Bay Channels, NY & NJ	$ 750,000
New York Harbor Collection and Removal of Drift, NY & NJ	$ 100,000
Operation & Maintenance	
Maintenance Dredging Construction and Management Projects (including Bay Ridge & Red Hook Channels, NY)	$36.7 million

WEDNESDAY, FEBRUARY 28, 1996.

TRES RIOS WETLANDS PROJECT AND RIO SALADO PROJECT

WITNESS

DAVID GARCIA, DEPUTY CITY MANAGER, CITY OF PHOENIX, ARIZONA

Mr. FRELINGHUYSEN. Mr. David Garcia, is he here? Deputy City Manager, City of Phoenix?

Thanks for your patience. You felt that maybe all was lost?

Mr. GARCIA. No, it was actually very interesting.

Thank you, Mr. Chairman and Mr. Bevill.

Mr. BEVILL. You just had an interesting election out there, I noticed.

Mr. GARCIA. The Mayor of Phoenix was originally to give this testimony, but he was compelled to stay in Phoenix this afternoon, so I get to speak to you all.

Mr. Chairman, I am David Garcia, Deputy City Manager for the City of Phoenix. I wanted to thank you for the opportunity to present testimony on behalf of the Mayor, the City Council, and the 1.1 million citizens of Phoenix and the 2.5 million residents of our metropolitan area. I might add that we comprise over 60 percent of the population of the State of Arizona in the Phoenix metropolitan area.

As some of you may know, Phoenix is one of the fastest growing areas in the country. In 1970, metropolitan Phoenix was the 33d largest metropolitan area in the country; the city is now the seventh largest city of the country in terms of population. This growth would not have been possible without our spectacular sunshine and environment, which lured people from all over the country, but more importantly without the water, that is the lifeblood of any community. We know that we would still be a sleepy desert town without the harnessing of the region's scarce water resources, which has been made possible in large part because of the efforts of this subcommittee; and on behalf of the citizens of my region, I want to extend a heartfelt thank you for all that you have done.

Much of the work before us needs to shift away from tapping new sources of water to developing better ways to use and conserve these valuable resources. A major component of that effort will be in finding ways to address problems that have developed as a result of our massive water delivery systems. To help us in this effort, the city is seeking funding assistance for the following projects and I would like just to summarize these and ask that my entire testimony be entered into the record.

Mr. FRELINGHUYSEN. It will be included in total. Thank you.

Mr. GARCIA. In conjunction with the Bureau of Reclamation, we are seeking $1 million for the Tres Rios Wetlands Enhancement Project for design and environmental review of the authorized project to restore wetlands habitat along nine miles of the Salt River, using effluent from the regional wastewater treatment facility in southwest Phoenix.

With the Corps of Engineers, we are requesting 500,000 for the Rio Salado Feasibility Study, which will continue funding of the feasibility phase of the Corps' study of habitat creation and enhancement along a five-mile segment of the Salt River to help restore the dry river bed. Also, 1.5 million for the Sky Harbor wetlands technology evaluation to restore wetlands habitat in an arid environment adjacent to Sky Harbor Airport, to evaluate the compatibility of a wetlands environment with nearby airport operations; and 300,000 for the Tres Rios Flood Control Project to initiate design and environmental review for flood control measures needed to protect the Tres Rios Wetlands Enhancement Project in cooperation with the Bureau of Reclamation.

Mr. Chairman, thank you for the opportunity to present this testimony. I know this hasn't been the most exciting or romantic testimony you have heard this afternoon, but these are important projects for us in the Southwest and in Phoenix, and I appreciate your consideration.

Mr. FRELINGHUYSEN. Thank you, Mr. Garcia.

Mr. BEVILL. I would like to ask, is that aqueduct doing the work?

Mr. GARCIA. The central Arizona project? Yes, sir.

Mr. BEVILL. It is nice to be flying at 35,000 feet and look down there and see it, and I have to make sure it is still there every time I do that.

Mr. GARCIA. We are using the water in Phoenix. We are in active discussions now between the three States—California, Nevada, and Arizona—over the actual allocation of that Colorado River water, but we are certainly grateful for the investment in that project, and it has actually enabled us to sustain the growth that I talked about earlier.

Mr. BEVILL. I was in Egypt once, and the guy kept saying, no Nile, no Egypt. I think we can say, no Colorado River, no West.

Mr. GARCIA. That is exactly right.

Mr. FRELINGHUYSEN. On that happy note, thank you.

[The statement of Mr. Garcia follows:]

TESTIMONY

OF

DAVID GARCIA

ON BEHALF OF MAYOR SKIP RIMSZA

AND THE CITY OF PHOENIX

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

COMMITTEE ON APPROPRIATIONS

FEBRUARY 28, 1996

3:50 P.M.

2362 RAYBURN HOUSE OFFICE BUILDING

Mr. Chairman, Mr. Bevill, and Members of the Subcommittee, I am David Garcia, Deputy City Manager of the City of Phoenix. I want to thank you for the opportunity to present testimony on behalf of the Mayor, City Council, and the 1.1 million citizens of Phoenix and 2.5 million residents of our metropolitan area. As some of you may know, Phoenix is one of the fastest growing areas in the country. In 1970, metropolitan Phoenix was the 33rd largest metropolitan area in the country. By the year 2000, it is projected to be 13th. The City itself is now the 7th largest city in the country in terms of population and the 2nd in land area.

This tremendous growth would not be possible without our spectacular sunshine which has lured people from all over the country, but more importantly, without water that is the lifeblood of any community. We know that we would still be a sleepy desert town without the harnessing of the region's scarce water resources which has been made possible in large part because of the efforts of this Subcommittee. On behalf of the citizens of my region, let me extend a heartfelt "thank you" for all you have done.

Much of the work before us needs to shift away from tapping new sources of water to developing better ways to use these valuable resources. A major component of that effort will be in finding ways to address problems that have developed as a result of our massive water delivery systems. To help us in this effort the City is seeking funding assistance for the following projects:

Bureau of Reclamation:

- Tres Rios Wetlands Enhancement Project: $1 million for design and environmental review of the authorized project to restore wetlands habitat along nine miles of the Salt River using effluent from the regional wastewater treatment facility in southwest Phoenix.

Corps of Engineers:

- Rio Salado Feasibility Study: $500,000 for continued funding of the feasibility phase of the Corps study of habitat creation and enhancement along a five mile segment of the Salt River to help restore the dry river bed.

- Sky Harbor wetlands technology evaluation: $1.5 million to restore wetlands habitat in an arid environment adjacent to Sky Harbor Airport to evaluate the compatibility of a wetlands environment with nearby airport operations.

- Tres Rios Flood Control: $300,000 to initiate design and environmental review of flood control measures needed to protect the Tres Rios Wetlands Enhancement Project in cooperation with the Bureau of Reclamation.

For example, the Salt River is the major watercourse through the Phoenix metropolitan area, but has been dry since diversion of its waters into the metropolitan water supply and irrigation systems. This has led to a corridor of low valued land and uses, dump sites, and vacant properties in the river bed.

Restoring the Salt River is a longstanding desire of the citizens of Phoenix for over 30 years. Efforts toward the realization of that dream include planning for a Rio Salado Parkway and initial park sites along the river, dealing with old landfills, some beautification efforts, and, based on flood control needs, planning for better utilization of lands along the river. However, it is the consensus in our community that none of these activities will lead to a successful revitalization of the river corridor until the river itself is restored.

In 1993 the Corps of Engineers was authorized to undertake studies evaluating the potentials of a Federal interest in the river, including habitat restoration, water quality and recreation. A completed reconnaissance level report identified a habitat restoration project along a five-mile portion of the Salt River through Central Phoenix as being feasible and the Corps was approved to proceed into the next stage.

The cities of Phoenix and Tempe have agreed to act as local cost sharing sponsors and a feasibility study work plan has been approved to begin the work. The purpose of this project is to create a habitat resource that can restore the condition of the river, to deal with environmental issues in that area, and to eliminate the visual blight created by the currently dry riverbed. The sponsors of the study with the Corps, Phoenix and Tempe, will pay 50% of the costs of the study. Our hope is to complete the study by the end of 1997, which is somewhat ahead of the Corps' current schedule, in order to request construction authorization in the 1998 Water Resources Development bill. Continued funding of $500,000 in FY 1997 is needed to ensure expedited completion of the feasibility phase of this project.

In cooperation with the Rio Salado study, the City is also seeking Federal funding and technical support to undertake an evaluation of wetlands creation technology on property adjacent to Sky Harbor Airport. The Sky Harbor Airport is the economic engine that drives much of the commerce in the city. It is also within our Enterprise Community. Restoration of the river is critical to developing the potential of the area.

The project would be undertaken under the authority of Section 307(d) of the Water Resources Development Act of 1990 on land provided by the City and would allow development and evaluation of much needed information on wetlands habitat restoration techniques in an arid environment focusing on design and construction approaches that minimize any adverse impact of wetlands habitat on airport operations. Information developed as a result of this effort could be invaluable in assisting airports around the country which are experiencing serious safety problems caused by nesting birds in wetlands located on or near airport properties. The City is requesting $1 million and bill language to direct the Corps to move forward on this important project.

Another project of importance to the region is the Tres Rios wetlands enhancement project underway with the Bureau of Reclamation. The City of Phoenix, in partnership with the cities of Glendale, Mesa, Scottsdale and Tempe, owns and operates an award-winning regional advanced wastewater treatment plant that discharges its highly treated effluent to a dry riverbed segment of the Salt River, which discharge recreates the stream flow. The facility's NPDES permit must be reissued next year and preliminary discussions with EPA indicate that up to $300 million in additional treatment may be needed to meet increasingly stringent water quality standards.

In 1992 Congress directed the Secretary of the Interior to study reclamation and reuse options with the City of Phoenix and its partner cities and authorized the Bureau to proceed with such studies. Three years of cost-shared studies, including a research and demonstration project, has shown that a wetlands enhancement project using highly treated effluent as a water source would offer the most cost effective and environmentally desirable option which addresses the need for additional wastewater treatment while providing opportunities for habitat restoration and recreational use.

The partner cities are seeking federal funding for the start of design and construction of the enhanced wetlands project. Under the current authorization in the Bureau's Title 16 program, the federal share of the total construction costs may not exceed 25 percent. The cities request for FY 97 funding is $1 million for design and environmental compliance work for the enhanced wetlands project.

In addition, we ask the Committee to provide $300,000 with bill language to require the Army Corps of Engineers to move ahead with an essential flood control feature of the project in cooperation with state and local officials. The Corps portion of the project is authorized under Section 321 of the Water Resources Development Act of 1990 and would be subject to flood control cost sharing.

Mr. Chairman, I want to thank you again for the opportunity to present testimony. I'll be happy to answer any questions that you or the Members of the Subcommittee may have.

WEDNESDAY, FEBRUARY 28, 1996.

UPPER MISSISSIPPI RIVER SYSTEM ENVIRONMENTAL MANAGEMENT PROGRAM

WITNESS

HON. STEVE GUNDERSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WISCONSIN

Mr. FRELINGHUYSEN. Congressman Steve Gunderson has joined us. We mentioned earlier that you were working hard on the Floor on the farm bill.

Mr. BEVILL. I think you will want to read in the record what was said about it.

Mr. GUNDERSON. It will be expunged before the official record comes out?

Mr. BEVILL. Too late.

Mr. GUNDERSON. I thank you for finding the time to allow me to testify. This is the fifth year in a row that I have been here to testify on behalf of the Upper Mississippi Environmental Management Program. It is the program that has been administered by the Corps of Engineers in cooperation with the Fish and Wildlife Service. It is one of those unique programs that is highly recognized as a cooperative management program of a multiuse resource; and it has taken what has been a traditional shipping channel, the Mississippi River, and found a way to make shipping and recreation and fish and wildlife habitat all able to operate in tandem in a positive, constructive way.

There have been two primary objectives of the EMP program. One of them is the habitat rehab program and the other, the long-term resource monitoring. Both of those are, frankly, study and construction programs that work to preserve the balance of the river that we see. The interesting thing about the Environmental Management Program is that it has not only satisfied the requirements of the authorizing legislation, but it has done so far beyond anybody's expectations, providing benefits at a level of funding less than the authorized level.

As many of you are aware, it took a while to get this program up and running. Last year was the fifth time that we had full funding at $19.4 million; with some of what you all deal with, 19.4 million is pocket change. But I also know, on the other hand, that you face especially tough constraints with the various demands that you are facing in each and every one of these areas.

We have faced over the history of the program roughly a $30 million gap between the authorization and the funding. And so what we are asking you today is not to make that up; we are asking if we can continue at that 19.4 million level in the future.

Another issue that we brought to this committee before—because this is not your typical kind of Corps construction project, we would ask if you would consider looking at the savings and slippage issue, especially in the LTRM part of that, because that is clearly a study part. There is no construction that is involved at all in that area.

This is important this year because we are nearing the year 2002. We will begin the process over in the authorizing committee to extend the authorization. I think it is essential, however, that we do not send signals that this program is about to be diminished. It is more important now than before. It is a bipartisan program and multistate program and one that we simply ask for your continued support and cooperation on.

Mr. FRELINGHUYSEN. Thank you for your testimony and perspective. The fact that you came back here to reinforce early testimony shows that it is important, and the committee, I am sure, certainly feels the same way.

Mr. GUNDERSON. Thank you, thank you very much.

[The statement of Mr. Gunderson follows:]

STATEMENT BY
Rep. Steve Gunderson
Before the Subcommittee on Energy and Water Development
Wednesday, February 28, 1996

Funding for the Environmental Management Program in the Fiscal Year 1996 Energy and Water Development Appropriations Bill

Mr. Gunderson: Thank you Mr. Chairman and Mr. Bevill for allowing me to again come before the Subcommittee to express my support for the Environmental Management Program (EMP) on the Upper Mississippi River. I've been here before and I'm pleased to say that with your support the EMP continues to be a great success. I hope Congress provides full authorized funding for the program in 1997 so that the EMP can continue to help preserve the valuable ecological resources of the Upper Mississippi River Basin.

While the Clinton Administration has not yet released their recommendations for the Army Corps of Engineers FY 1997 budget, I have received strong indication that the Corps will receive significant cuts to its construction budget. It is essential that the Subcommittee recognize the value and importance of the EMP in its FY 1997 Appropriations.

Background and History of Support for EMP

As you know, the EMP was authorized in the 1986 Water Resources Development Act (PL 99-662) and first received funding in 1988. Its mission is to foster a comprehensive and cooperative approach to management of the multi-use and interjurisdictional resources of the Upper Mississippi River.

The Upper Mississippi River System is truly unique. Nowhere else in the country does a waterway serve as a system for major national wildlife refuges, an essential commercial navigation system, and an invaluable recreational resource. More barge traffic than ever before now transports a wide variety of essential goods on the Upper Mississippi River System. At the same time, millions use the river each year for recreational activities, including swimming, boating and fishing. The EMP was designed to address the multiple use characteristic of the river and foster a balanced relationship between navigation, recreation, and environmental and fish and wildlife preservation.

Since its creation, the EMP has pursued three main objectives: the enhancement and rehabilitation of fish and wildlife habitats (the Habitat Rehabilitation and Enhancement Project or HREP); long-term resource monitoring to promote a better understanding of the Upper Mississippi River System and facilitate better resource management (Long-Term Resource Monitoring or LTRM); and computerized inventory and analysis.

The program is directed by the Army Corps of Engineers and funded through the Corps' general construction budget. In addition, the U.S. Fish and Wildlife Service, the

National Biological Service, and the five Basin states significantly contribute to both the HREP and the LTRM.

Mr. Chairman, I think the Subcommittee is already aware of the very broad-based support this program has won. The National Research Council said the EMP should serve as a model for federal-state partnerships on other rivers, stating: "It is among the first in the nation to address conflicting federal mandates for large interstate rivers and to redress habitat degradation caused by alterations within the rivers and their drainage basins."

Similarly, the Corps, in testimony before Congress, and the Director of the U.S. Fish and Wildlife Service have praised EMP as an important model for future programs in this country and abroad. In fact, in July 1994, a conference of international river experts convened at the program's Environmental Management Technical Center (EMTC) to discuss river management, using the program as a model. In late 1995, three complete volumes of the international science journal, "Regulated Rivers: Research and Management," were devoted to papers presented at that conference. These issues provide the most comprehensive, high quality, and timely information currently available on the management of large floodplain rivers.

Highlights of EMP's Accomplishments

As a retiring Member, it is rewarding to look back upon the projects completed by the EMP, a program I have fought so hard for, and witness the positive and profound effect the program has had on the Upper Mississippi River System. Having a centralized Upper Mississippi River Environmental Management Technical is providing far greater benefits to other programs and agencies than originally foreseen.

Some benefits were always foreseen. For instance, LTRM Program data are being widely distributed through both traditional and state-of-the-art means. The EMTC has produced over 170 scientific and technical reports, many of which are used to support management decisions by several agencies within the five basin states.

All automation activities identified in the authorizing legislation have been implemented and are operating successfully. The electronic data clearinghouse established by the EMTC in 1994 is accessible via the internet and World Wide Web. From January through December, the clearinghouse was electronically accessed over 100,000 times by individuals from all 50 states and 53 foreign countries. Many individuals examined and then freely retrieved specific biological, physical and spatial data and information relating to the Upper Mississippi River System.

Other benefits of the program were unforeseen, but were a welcome surprise. The data sets provided by the program are being incorporated into the Army Corps of Engineers Upper Mississippi River-Illinois Waterway System Navigation Study to address the potential environmental effects of increased commercial navigation. Such multiple uses of high-quality data represent an extremely efficient use of funds.

In addition, the EMTC continues to attract new partners. The Environmental Protection Agency (EPA) in fulfilling the requirements of the Oil Pollution Control Act of 1990, formed a partnership with the EMTC, providing additional funds and technical support to develop spatial databases that will aid in responding to an oil spill crisis on the River.

The National Biological Service and the Fish and Wildlife Service used the EMTC to support implementation of a migratory bird strategy on the Upper Mississippi River System, and to serve as a Regional Coordination Center for mapping land cover and wildlife habitat, making information available to the Upper Midwest states.

So far, the construction of at least 17 habitat projects has been completed, 14 projects are underway, and approximately 15 more are in the planning and design stages. EMP activities do not stop after project construction. Monitoring and evaluation, on-going at the completed project sites, are demonstrating that the projects are successfully improving and providing productive backwater habitat for fish and wildlife resources.

For example, monitoring studies at the Brown's Lake project near Bellevue, Iowa, have shown that the combination of deeper depths provided through dredging newly installed water-control structure have provided a viable and valuable over-wintering area for fish within the lake. Information we've gathered through habitat project site monitoring and the Long Term Resource Monitoring Program is consistently cycled back to engineers and biologists for consideration into the planning and design of pending habitat projects.

Information we gathered as a result of the 1993 flood will help us design future navigation systems that are more compatible with the environment, especially with regard to hydropower, sedimentation, fish and wildlife, and water pollution. The success in Pool 7 near La Crosse, Wisconsin, in improving environmental conditions for the reestablishment of vegetation and increased waterfowl nesting, and the Finger Lake project in Minnesota, which succeeded in sufficiently raising dissolved oxygen levels in the backwaters, have both resulted in an increase in the number of backwater fish species.

More recent projects include the Bussey Lake project in Iowa, which combines channel dredging for fishery and new habitat construction projects, and the creation of new, moist soil areas for nesting and fishery habitats. The Peterson Lake, Minnesota project created a 500 acre backwater lake for just under $1 million. This project should adjust flows to reduce sedimentation into the lake and improve habitat.

EMP Funding History

Last year, for the fifth year in a row, the Subcommittee provided full funding of $19.46 million for the EMP. Once again, I am hopeful that the Subcommittee will fully fund the EMP at the authorized level of $19.46 million.

As I have explained in past testimony, maintaining full funding for the program is especially critical at this stage, given the shortfalls in funding during the program's early years. For your information, I have included a table in my testimony which illustrates the program's funding history:

Year	Authorized	Appropriated (millions)	Shortfall
88	16.72	5.16	11.55
89	18.56	7.90	11.06
90	19.95	14.86	5.09
91	19.46	17.00	2.46
92	19.46	19.46	0
93	19.46	19.46	0
94	19.46	19.46	0
95	19.46	19.46	0
96	19.46	19.46	0
97	19.46		
Total	191.45	$122.91	$30.16

You can see by the figures that EMP funding to date has fallen short by $30 million. The annual cap on appropriations and the impending termination of authorization for the EMP makes it impossible for the program to recapture shortfalls. The shortfall is amplified by the fact that the funds are not even cost-indexed in the authorizing legislation.

Required Funding

I, like all Members, am aware of the increasingly restrictive budget constraints facing all federal programs. However, several factors signify that this year, more than ever, the EMP needs full funding of $19.46 million.

First, the "savings and slippage" policy applied to the EMP by the Corps over the years has cost the EMP over $12 million in the last five years alone. The Corps' practice is to project the amount of appropriated construction funds that will not be spent because of projects that fall behind schedule. Based on this amount, the Corps then assesses all construction projects with a pro rata share of the "slippage" found in the total prior year's construction budget.

While the Corps has ceased this practice for the LTRM, it continues to do so for the HREP. Unfortunately, the EMP sunsets in 2002, so many projects that have been extended due to low funding and would otherwise have received funding savings previously removed as slippage will never be completed, as the authorization to complete the projects will have expired. In addition, the Corps may not be able to fund projects that are immediately ready for construction by refunding savings and slippage, as it is becoming increasingly likely that the Corps will not receive sufficient funding this year to do so.

Second, the Fish and Wildlife Service's practice of assessing overhead and administrative costs to the EMP result in losses as well. I would like this subcommittee to examine the possibility of inserting in their appropriations report lanugage directing the Fish and Wildlife Service to cease assessing those costs to funds allocated to the EMP. In the absence of such language, further apropriations cuts to the program would be particularly detrimental.

Given the likely loss of funds through slippage and savings assessments, overhead and administrative assessments, and the impending termination of authorization for the EMP, a budget cut from this Subcommittee would be devastating.

Finally, full funding is essential this year because the federal and state partners in the EMP will begin the joint report required by EMP authorizing legislation. This report will provide a basis for possible reauthorization of the program. Congress should not withhold funds from the EMP at a time the program will be undergoing an extensive evaluation.

Summary

I know the Subcommittee will realize the importance of the EMP, both to the Upper Mississippi River region and as a model for future programs throughout the nation. This Subcommittee deserves credit for its foresight in recognizing the value in a comprehensive and cooperative approach for managing a multi-use resource like the Mississippi. Thanks to the funding provided the EMP over the last five years, the program has been able to make unparalleled strides in protecting the river's magnificent resources.

We need now to maintain the program's authorized funding level, and continue to ensure that those funds are put to their maximum good use.

Thank you again for allowing me the opportunity to bring the EMP to the attention of the Subcommittee. I am ready at all times to work with Members of the Subcommittee to improve this model river management program.

WEDNESDAY, FEBRUARY 28, 1996.

LOUISIANA COASTAL RESTORATION PROGRAM

WITNESS

JACK C. CALDWELL, SECRETARY, LOUISIANA DEPARTMENT OF NATURAL RESOURCES

Mr. FRELINGHUYSEN. Are there some representatives here from—is Mr. Caldwell here? Boy, the fact that you are at the end of the line probably means that you get the bulk of the money; I don't know. You represent the Louisiana Department of Natural Resources, is that right, the Secretary?

Mr. CALDWELL. I am the Secretary.

Mr. FRELINGHUYSEN. Thank you for being with us this afternoon. You are at the tail end, and we appreciate your being here.

Mr. BEVILL. We will let him at least have what money is left.

Mr. FRELINGHUYSEN. Not much, is there?

Mr. CALDWELL. Thank you, Mr. Chairman. This is my first appearance before your subcommittee. I have filed my written testimony in the record, and I very much appreciate the opportunity to appear before you on a very pressing matter.

As you probably are aware, the Gulf Coast wetlands at the mouth of the Mississippi River are disappearing at the rate of 25 square miles per year. We have already lost 450 square miles, and we expect to lose another 350 or 800 square miles if something isn't done about it; I am the point man on trying to do something about it.

The causes of this loss are very well understood, and I want—I have a short map for you there and I want to show you on my big map. This is a digitalized, computer-generated map. It is not an aerial photo; it is based on satellite photography, but it is generated by a computer. And we have done this in connection with the class action suit that is presently pending on the matter that I am talking about.

The cause of loss in the marshes—this is below New Orleans; New Orleans is about 20 miles upstream—is the fact that we constructed levees and that cut off fresh sediment and fresh water in the marsh. That caused the marsh to subside and compact, and salt water came in; and as you can see, it has got a Swiss cheese effect all the way over. The whole shoreline is receding, as you can see.

We are doing something about it. A lot of projects have been launched. We have numbers on them, and they are identified. The biggest one and the best one is ready to kick off. That is called the Davis Pond Project. The purpose of the Davis Pond Project—it is an $80 million project; it going to be cost-shared 25 percent by the State of Louisiana and 75 by the Federal Government. We are going to put gate structures on the Mississippi River so that during high water, we have flood sediment and fresh water come into the marsh. It is a beautiful project, because we are expecting to recover 80,000 acres of marsh.

It is a very cost-effective, and it is all ready to go. It is funded. We are ready to let it for contract bids, but there is one problem.

How we got into this mess I don't know, but fresh water kills oysters. Oysters cannot live in water any fresher than five parts per thousand. The present five parts per thousand point is the northerly line on your map. When we finish the project, the line is going to move south. And we are inevitably going to wipe out 8,700 acres of oyster leases, which are indicated in yellow on your map.

Below that, these are the rest of the oyster leases in the area, and as you can see, this is Louisiana's most prolific oyster area. We have 106,000 acres of oyster leases below that. Fortunately, we think that this is all that is going to be wiped out.

So what we want to do is relocate these; it can be done, and it is not extremely expensive. It is very cost-effective. But it has got to be done; that is the point. We figure to relocate an oyster lease down farther south will cost about $2,200 per acre, so it is going to take about $19 million to do this. And the State, of course, is willing to cost-share, pay our one-fourth of the cost.

The value of an acre of oysters can range up to $7,000 an acre, so it is going to have a beneficial effect, and in the long run, these are the only people that are going to suffer. We think we are going to have a bigger oyster industry than ever. It is estimated we are going to gain $10 million a year in additional oysters and shellfish.

Now, the reason this is not imaginary is because we did a similar project on the east bank. It is working beautifully. It was completed in 1991. Fresh water is coming in through—this is the Breton Sound Project. It is coming in through the structure. The salinity line has moved south. The marsh is being regenerated, and everything is going grand, except maybe paying the oystermen over there is, we now have a class action suit with a thousand oystermen, and it is pending in the courts now, so we don't want the same thing to happen over here. This is the only thing holding up the project is this money.

Now, we may not need a whole 19, because during construction—it is going to take about three or four years—some of these leases will be expiring; they will not be renewed, and of course the terms will be shorter and that may cut down on the amount of money that we have to pay them in relocating them.

So that is the story, and as can you see, again we are not talking about costs, we are talking about investment. The payoff is enormous. It is just we have got to take care of this, or we will be met with an injunction this time. I have no doubt that we will be facing an injunction. Thank you, Mr. Chairman.

Mr. FRELINGHUYSEN. Thank you, Mr. Caldwell. You get A-plus for graphics. I didn't realize there were that many oyster beds down there.

Mr. BEVILL. How do you move the oysters? By hand?

Mr. CALDWELL. No, you find a hard bottom and you lay what is called cultch; it can be shell or limestone. Then you plant new oysters on that bed.

But, no, the old ones, they are all going to die. The ones north of the 5-PPT line, these will all be dead.

Mr. BEVILL. Several years ago, I and other members of this panel, we flew out to the end; I think it was about 100 miles.

Mr. CALDWELL. Wonderful, then you know that I am speaking the truth, if you fly over it, it breaks your heart to see that marsh just disappearing.

Mr. BEVILL. You have a lot of wildlife out there that is beautiful.

Mr. CALDWELL. Yes, sir, it is birds and oysters and shrimp and crabs and on and on that are going to be benefited from this project; and people, recreation, too, and hunting and fishing and bird-watching and all kinds of good stuff. Thank you.

Mr. FRELINGHUYSEN. Thank you, Mr. Caldwell.

[The statement of Mr. Caldwell follows:]

Congressional Hearing Testimony
of
Jack C. Caldwell, Secretary
Louisiana Department of Natural Resources
February, 1996

My testimony today is focused on one issue: to request that the United States Congress provide the necessary authority and allocate sufficient funding to cover the federal share of the oyster lease relocation costs associated with the Davis Pond Freshwater Diversion Project. I will submit to you an estimate of these costs and a number of alternatives for your consideration.

The areas I will be discussing today are the Breton Sound and Barataria Estuaries of Louisiana. Both are immediately south of New Orleans. Breton Sound is on the east bank of the Mississippi River, Barataria is on the west bank (figure 1). The federally-sponsored projects benefiting these areas are the Caernarvon and Davis Pond Freshwater Diversion Projects, respectively. The Caernarvon Project was completed in 1991, and the Davis Pond Project is expected to be completed in 1999. Both projects were authorized by the Flood Control Act of 1965, the Water Resources Development Act of 1974, and the Water Resources Development Act of 1986.

The Breton Sound and Barataria Estuaries flank and protect our nation's most important inland shipping corridor and are of primary importance to Louisiana's commercial fisheries harvest, which has an estimated annual market value of almost $1 billion. Among the many other assets protected by these marshes are the Greater New Orleans Metropolitan Area and major oil and gas transportation and processing facilities. The region is clearly of considerable national significance due to its biodiversity, and economic, commercial, cultural, and strategic importance.

Already, 71 square miles of coastal wetlands within the Breton Sound Estuary and 383 square miles of those in the Barataria Estuary have been lost since 1932. Current projections indicate that during the next 50 years another 52 square miles in Breton Sound and another 274 square miles of the Barataria Estuary will disappear unless preventative measures are undertaken[1]. The combined area of historic and projected loss in these two estuaries is 780 square miles. This is roughly twice the area encompassed by the entire metropolitan area of Washington, D.C.

The two primary causes of this land loss problem are sediment deprivation and saltwater intrusion[2] which are directly linked to flood control levees and navigation projects. It should not be surprising, then, that the linchpin strategy for benefitting these two estuaries is the re-introduction of water and sediment from the Mississippi River via the Caernarvon Diversion into Breton Sound and the Davis Pond Diversion into Barataria[3].

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[1] Coastal Wetlands Conservation and Restoration Task Force. 1993. Louisiana Coastal Wetlands Restoration Plan.

In 1984 an Environmental Impact Statement was prepared for these two projects[4]. The expected average annual benefits to commercial fish and wildlife production and recreation for the two projects are enormous: $6,054,000 for Caernarvon and $9,710,000 for Davis Pond. It is interesting to note that the predicted annual benefits attributable to increased oyster productivity alone is $5,416,000 for the Caernarvon Project and $8,783,000 for the Davis Pond Project (Table 1). Additionally, over the 50-year project life, Caernarvon is credited with the preservation of a total of 16,472 acres of marsh, and Davis Pond is credited with the preservation of 82,690 acres of marsh.

This 1984 EIS projected that as a result of each project, oyster productivity would on average be shifted to an enlarged area delimited by the projected five and fifteen parts-per-thousand isohaline contours. This document further stated that as an unwanted consequence of this seaward movement of the 5 parts-per-thousand line, those currently productive leases between the existing 5 parts-per-thousand salinity line and the projected 5 parts-per-thousand salinity line were predicted to become over-freshened. The 1984 EIS predicted that 5,000 acres of oyster leases in Breton Sound and 10,000 acres of oyster leases in Barataria would be adversely impacted.

However, for various reasons, a plan to relocate those leases which were expected to be adversely impacted was never developed. This real estate problem remains unaddressed in the existing Project Cooperation Agreements between the Department of the Army and the State of Louisiana for the construction of the two projects. Neither federal nor state funds have been allocated for this purpose.

The Caernarvon Project was completed for $26 million in February of 1991 and operation commenced on August 5, 1991. Data collected to date indicate that all of the project's objectives are being achieved (figures 2-5).

All is not well, however. On March 29, 1994, a class-action suit was filed on behalf of 106 petitioners against the Louisiana Department of Natural Resources in the 25th Judicial

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[2] Ibid.

[3] Coastal Wetlands Conservation and Restoration Task Force. 1993. Louisiana Coastal Wetlands Restoration Plan.

[4] U.S. Army Corps of Engineers. 1984. Louisiana Coastal Area, Freshwater Diversion to Barataria and Breton Sound Basins. Feasibility Study and Environmental Impact Statement.

District Court for Plaquemines Parish. According to the petition, "[The] plaintiffs seek to recover compensation for the destruction of their leasehold interest which were appropriated for public use by the State of Louisiana through the actions of the Department of Natural Resources." A parallel suit filed in the Court of Federal Claims was decided in favor of the Federal Government, but is now under appeal. The suit against the state is now in the class certification stage.

As to the present status of that litigation, as mentioned above, the Court of Federal claims decision resulted in a dismissal of the plaintiffs' federal suit in its entirety. In that matter, plaintiffs' counsel had stipulated that the zone where conditions would become too fresh for oyster cultivation as a result of the Caernarvon diversion coincides with an area that was historically (prior to 1960) too fresh and not favorable for oyster cultivation. In contrast, plaintiffs' counsel has taken an entirely different approach in the state litigation and has contended that most of the leases affected by the Caernarvon project lie outside of this historically fresh area.

The significance of the plaintiff's stipulation in the federal case is that the Justice Department was able to argue that the entire Mississippi River Levee system is a "nuisance" in that it accidentally caused salt water intrusion by preventing fresh water from the river to flow through the Breton Sound area. This resulted in destruction of the adjacent land and a continuing erosion problem. As the land disappeared, the salt water continued to encroach further inshore. Oyster leaseholders were then forced to begin leasing land further inland in the historically fresh areas.

The Caernarvon diversion project was designed and intended to divert fresh water to reverse the harmful effects of a "nuisance," i.e., the Mississippi River Levee system. Therefore, the Justice Department contended that the plaintiffs had no recognizable property interest in continued salt water intrusion, an incidental and accidental development. The Court of Federal Claims agreed, but for slightly different reasons and dismissed the entire case. The Justice Department anticipates that the D.C. Circuit will affirm.

In contrast, the state litigation, although it involves many of the same original plaintiffs, involves a different fact situation. The plaintiffs have not stipulated the same facts and have actually claimed that their leases are located throughout the entire Breton Sound area. We therefore anticipate that presiding Judge Roe will certify the entire Breton Sound area consisting of some 80,000 acres as a class. This would mean a class of approximately 1,000 oyster leaseholders as members. DNR is vigorously opposing class certification through the use of a GIS data base. Unfortunately, it appears that a substantial number of claimants will still recover in the State litigation.

Based on the Caernarvon scenario, DNR hopes to avoid a similar situation for the Davis Pond Project. In this regard, DNR hopes to initiate a program wherein the oyster lease holders would be relocated before the project actually goes "on-line." This would avoid any actual damages and limit the exposure to relocation costs. Plans are underway now to develop a program along these lines.

The Department of Natural Resources and the Department of Wildlife and Fisheries are currently working with leaders from the oyster industry to develop a scientifically-based oyster lease evaluation formula which could be used not only to provide for equitable relocation of leases impacted by wetland restoration projects, but by other water dependent activities such as oil and gas exploration and production.

We have estimated that the relocation costs involved in relocating the 8,735 acres currently under lease north of the projected (with project) 5 part-per-thousand line will be $19,915,800. The estimated relocation costs per acre are as follows: for water-bottom preparation of new areas @ $2,200 per acre, plus costs of evaluating existing leases @ $30 per acre, plus costs of evaluating proposed acreage for relocation purposes @ $30 per acre, plus administrative costs to the U.S. Army Corps of Engineers @ $5 per acre, plus administrative costs to the La. Department of Wildlife and Fisheries @ $10 per acre, plus administrative costs to the La. Department of Natural Resources @ $5 per acre. The sum of these costs totals to an estimated $2,280 per acre. Quantum studies and court valuations indicate an average acre value at $7,000 in Plaquemines Parish, which may result in significant exposure due to the fact that the project EIS indicates 10,000 acres are at issue.

Secondly, let me mention a few alternative instruments that I am aware of that may be appropriate to provide these funds: 1) through the Water Resources Development Act, 2) the Appropriations Bill, and 3) the Uniform Relocation and Assistance Act.

In these days of tight budgets, we must recognize opportunities to invest in those natural assets which are capable of producing economic benefits well into the future. The Barataria estuary provides food, employment and the protection of industrial, municipal and navigational infrastructure. Therefore, these relocation costs will serve to complement a good idea that has demonstrated its worth through the increased commercially-significant biological productivity as reflected by the data collected from the Caernarvon project. We must not allow the Achilles' heel of unaddressed real estate concerns to destroy this badly-needed river diversion project.

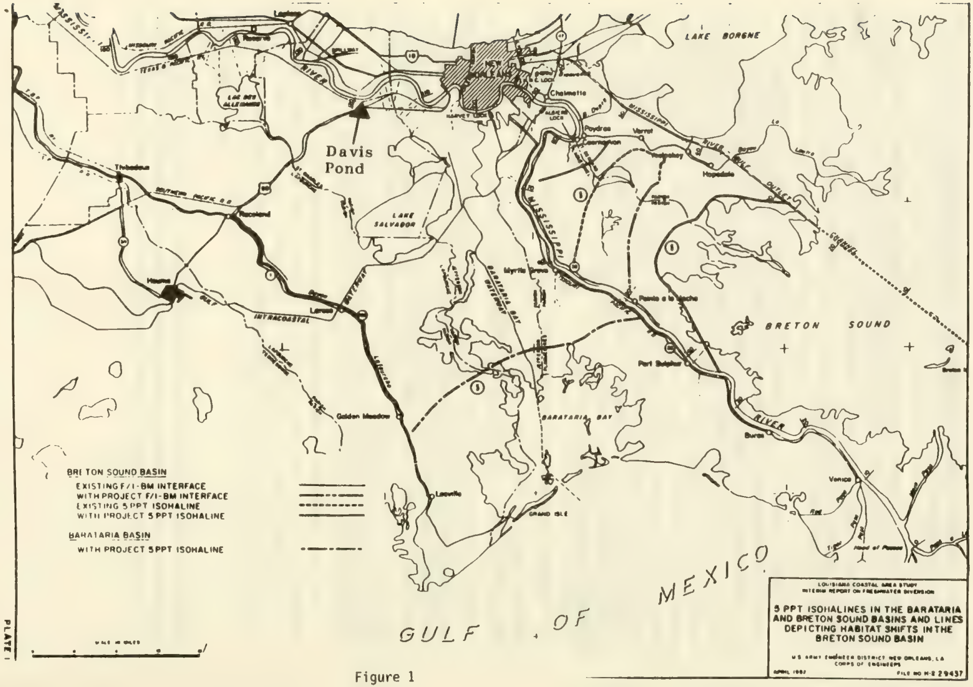
LAKE BORGNE
NEW ORLEANS
Chalmette
Poydras
Verret
Hopedale
Davis Pond
LAKE SALVADOR
LAC DES ALLEMANDS
Thibodaux
Raceland
Houma
Larose
Golden Meadow
Leeville
GRAND ISLE
BARATARIA BAY
BARATARIA BAY WATERWAY
Myrtle Grove
Pointe a la Hache
Port Sulphur
Buras
Venice
Head of Passes
MISSISSIPPI RIVER
MISSISSIPPI RIVER GULF OUTLET CHANNEL
INTRACOASTAL
BRETON SOUND
GULF OF MEXICO
BRETON SOUND BASIN
EXISTING F/I-BM INTERFACE
WITH PROJECT F/I-BM INTERFACE
EXISTING 5 PPT ISOHALINE
WITH PROJECT 5 PPT ISOHALINE
BARATARIA BASIN
WITH PROJECT 5 PPT ISOHALINE
SCALE IN MILES
LOUISIANA COASTAL AREA STUDY
INTERIM REPORT ON FRESHWATER DIVERSION
5 PPT ISOHALINES IN THE BARATARIA AND BRETON SOUND BASINS AND LINES DEPICTING HABITAT SHIFTS IN THE BRETON SOUND BASIN
U.S. ARMY ENGINEER DISTRICT NEW ORLEANS, LA
CORPS OF ENGINEERS
APRIL 1982
FILE NO H-2 29437
PLATE I

Figure 1

SUMMARY OF AVERAGE ANNUAL ECONOMIC BENEFITS

From 1984 U.S. Army Corps of Engineers EIS*

Table 1

	Davis Pond	Caernarvon
Oysters	$8,783,000	$5,416,000
Shrimp	426,000	130,000
Menhaden	90,000	5,000
Other Fisheries	46,000	7,000
Commercial Wildlife	106,000	185,000
Recreation	259,000	311,000
TOTAL	$9,710,000	$6,054,000

*Assuming 8 ⅛ % discount rate and 1983 prices.

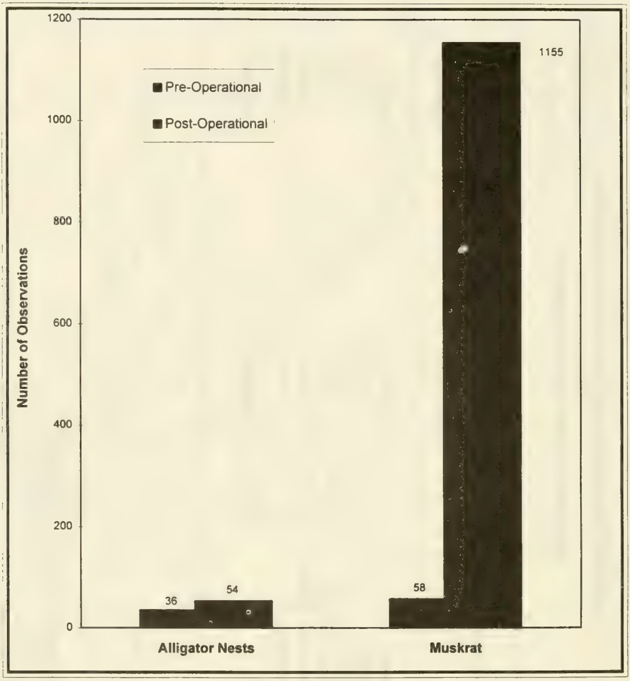

Figure 2. Wildlife observations at Caernarvon illustrating significant increases in alligator nests ($p<0.001$) and muskrats ($p<0.001$). Observations were made during pre- (1988-1990) and post-operational (1991-1994) periods. Data taken from Caernarvon Project, Alligator Analysis and Muskrat Analysis, June 1995, Dr. James P. Geaghan, LSU, Report for Louisiana Department of Natural Resources.

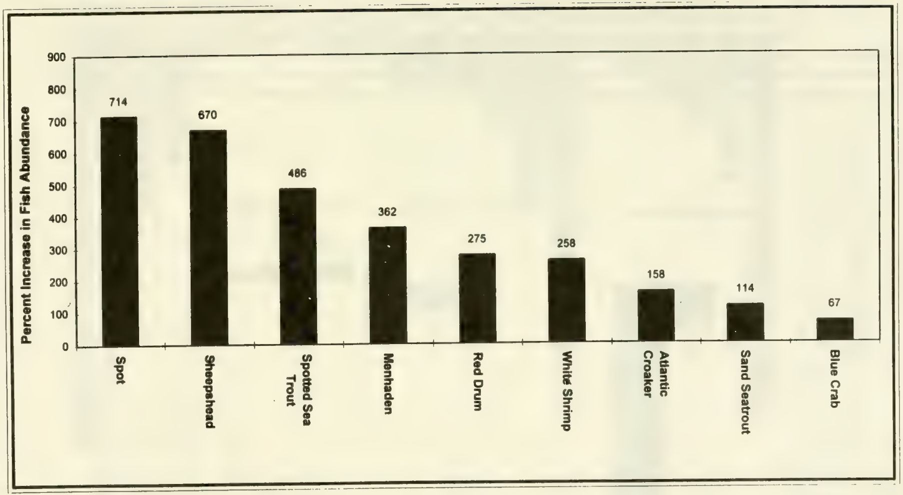

Figure 3. Percent increase in finfish and shellfish abundance at the Caernarvon project area between pre-operational (1988-1990) and post-operational (1991-1994) periods. Samples were taken monthly during pre- and post-operational periods. Data taken from: Caernarvon Project, Fish Analysis, May 1995, Dr. James P. Geaghan, LSU, Report for Louisiana Department of Natural Resources.

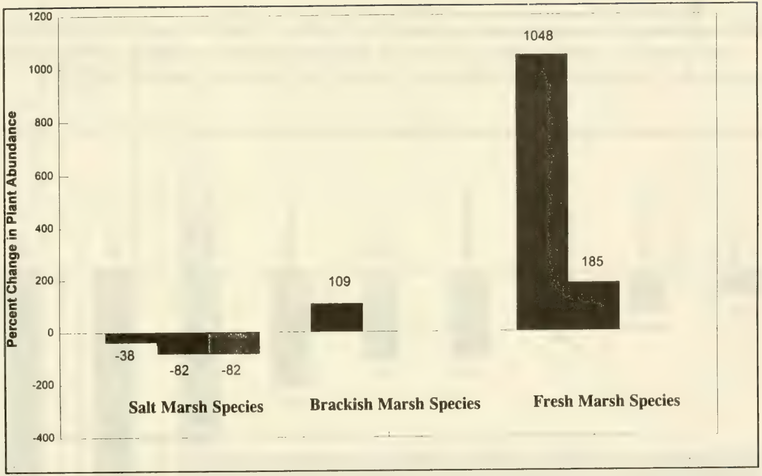

Figure 4. Percent change for dominant vegetation species at the Caernarvon project area between pre-operational (1988-1990) and post-operational (1991-1994) periods. Decline in salt marsh vegetation and increase in abundance of fresh and brackish marsh vegetation indicates abatement of saltwater intrusion. Salt marsh species include oystergrass, needlegrass, and saltgrass. The brackish marsh species measured was wiregrass, and the fresh marsh species were smartweed and pluchea.
Data taken from: Caernarvon Project, Vegetation Analysis, July 1995, Dr. James P. Geaghan, LSU, Report for Louisiana Department of Natural Resources.

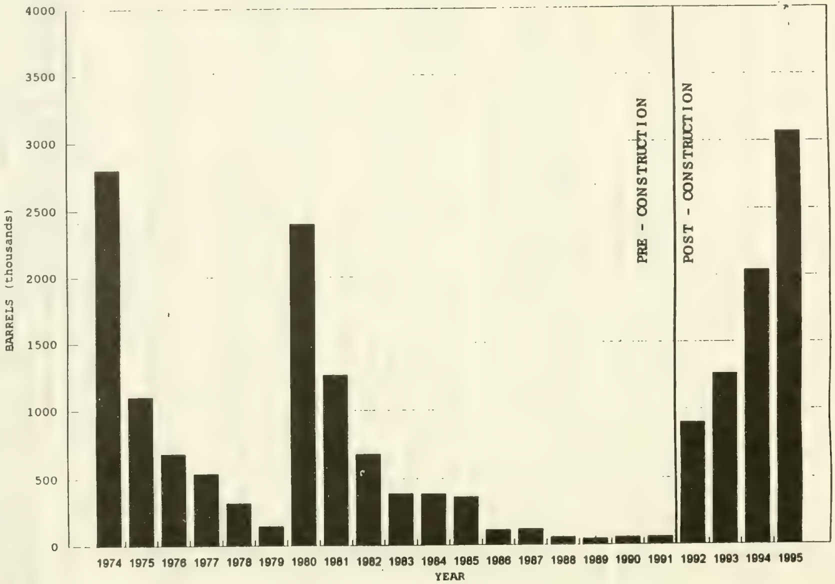

Figure 5. - Oysters Available on the Public Oyster Seed Grounds in Breton Sound.
Louisiana Department of Wildlife and Fisheries
August, 1995

Mr. FRELINGHUYSEN. On behalf of the committee, I thank everybody for being here, most especially Mr. Bevill for being right here to give me all sorts of advice on oyster beds and everything, and everybody on the staff. Thank you very much.

We stand adjourned until tomorrow morning at 10 o'clock.÷

THURSDAY, FEBRUARY 29, 1996.

FUEL CELL DEMONSTRATION PROJECT

WITNESSES

REVEREND WILLIAM L. GEORGE, S.J., GEORGETOWN UNIVERSITY
REVEREND T. BYRON COLLINS, S.J., GEORGETOWN UNIVERSITY

Mr. MYERS. The committee will come to order.

We apologize for the delay. We will be behind 5 minutes all day today, I guess, or at least till noon. So please accept our regrets for perhaps what happens on the Floor, which is our primary responsibility. We do have these things over here. We have to come over and listen to you.

Father GEORGE. We hope you catch up.

Mr. MYERS. Well, what has happened to Georgetown?

Father GEORGE. The coach never wins at Providence, his alma mater, if you check the record. What an embarrassment. Throwing your towel and getting a technical. They never do that in Indiana. You can kick over chairs and water buckets in Indiana and they never worry about it.

Mr. MYERS. Well, you are sensitive to things like that.

Well, I am back on the record. You got all that, didn't you?

We are pleased to have you. Regrets again, but we will try to give you an extra minute for it. We are pleased to hear from you. Your entire prepared text will be put in the record and you may proceed as you care to.

Father GEORGE. Thank you, Mr. Chairman.

Mr. Chairman, members of the committee and staff, thank you for the opportunity to testify. I am Father George, this is Father Collins, my senior religious; we are both assistants to the president. This is Dean Price behind us, who is the architect of our energy master plan for the university, and to my left is Philip Sineneng, a resident student who makes sure I don't forget things on this topic.

Mr. MYERS. He better be closer than that, then, to have that responsibility.

Father GEORGE. We are so forgetful in our old age.

We will talk about the topic we did last year. We have made significant progress legislatively and conceptually with the waste energy program. It takes sunlight briefly, and through photovoltaics creates hydrogen with the regeneration. It then takes solid waste and creates again hydrogen by breaking that down in a benign way, and we run fuel cells through that with that hydrogen and the various gases. It creates electricity and heat and water and we can use the water. It is pure deionized water that is drinkable, which actually the astronauts from the fuel cells up in space drink that water.

So, fundamentally, that is what we are asking the committee. We have worked with various government agencies over the last year in proving that the concept is ready to be demonstrated and commercialized. And we believe with one good demo that the market will be ready and we will create an industry for our country. That is what we would like this committee to consider.

Father Collins would like to address the legislative progress we have made.

[The statement of Messrs. George and Collins follow:]

Philip SINENENG

Subcommittee on Energy and Water Development
Committee on Appropriations
U.S House of Representatives
Public Witness Testimony for FY'97

February 29, 1996
RHOB - Room 2362
10:00 am

Mr. Chairman and members of the committee, we are Rev. T. Byron Collins, S.J., and Rev. William L. George, S.J., Assistants to the President of Georgetown University and with us is Dean Price, Architect Emeritus and Special Advisor to Georgetown University. Thank you for the opportunity to testify on a research and development project supported by Title II of revised S. 1153 entitled Solid Waste and Sunlight - to - Hydrogen by use of a Photovoltaic Array as a Total Energy Regeneration System.

Title I of revised S. 1153, which is derived from HR655 that passed the House (Representative Walker) and its Senate companion bill, S1077 (Senator Harkin and others) is aimed at directing the Secretary of Energy to conduct a research, development, and demonstration program leading to the production, storage, transport, and use of hydrogen for industrial, residential, transportation, and utility applications.

Title II of revised S. 1153 includes the *Solid Waste and Sunlight - to - Hydrogen by use of a Photovoltaic Array as a Total Energy Regeneration System*. The systems benefits can be summarized as follows:

Solid Waste and Sunlight - to - Hydrogen by use of a Photovoltaic Array as a Total Energy Regeneration System

- Creates an integrated, on-site total energy system
    - hydrogen production from solid and complex waste mitigation
    - hydrogen production from solar regeneration using photovoltaics
    - environmentally benign power generation and storage
    - clean water production (10,000 gallons per 10 tons of net waste)
    - oxygen production for biomass reforming and medical uses
    - carbon monoxide mitigation
- Accelerates U.S. Commercialization
    - biomass reformers, fuel cells, superheated steam reformers, electrolyzers, photovoltaic.
- Advances an industry to meet key areas of national need
    - water production and waste reduction in the needed areas
    - distributable and expandable power in isolated areas

Public and private utilities would directly benefit by decreasing large long term capital costs of large plants by using clean, distributed, expandable power. This system also produces methanol fuel for transportation. The authorization for appropriations is $50 million over the fiscal years FY97 and FY98 with a matching funds requirement of 50%.

There are scheduled to be multiple follow on sites whose construction will be funded from non-federal sources. The cost of planning and design concepts for sites in Billings, Montana, Albuquerque, New Mexico, and a designated site in Alaska will be provided when funds are appropriated after revised S. 1153 becomes law. We request Committee support for the funds in revised S. 1153 when it becomes law.

96:approp96\energy\tsi bdr

Father COLLINS. At the request of this committee, as we have been on this topic for a number of years, Senator Burns, working with Mr. Walker, has sectioned in the hydrogen bill that we are having a hearing on. It is supported bipartisanly among the active supporters of Senator Burns, Senator Domenici, and Senator Murkowski.

The purpose of it is to implement the program, as Father has said, and the request for funds, the authorized will be at $50 million over 2 years. It requires a 50 percent match. The reason we are test flying is if the bill is enacted in time, and it looks as if there is good support on both sides, we will ask the committee for consideration for the funding in fiscal year 1997 at $25 million. It has to be matched.

Thank you.

Mr. MYERS. Well, thank you. Certainly the authorizing committee has been very high on hydrogen. Not that we have not been either, but, of course, we cannot do anything unless they are authorized. They kind of frown on us authorizing out of the appropriation process. So we do have a little difficulty in that respect.

But your programs, several things you have experimented at Georgetown have worked out very beneficially, so we know you do good work there. Just shift it over to the basketball court, too, if you can.

Father GEORGE. Don't bet against us.

Father COLLINS. Thank you, Mr. Chairman.

Mr. MYERS. I quit betting. Thank you very much for your testimony.

Father GEORGE. Thank you, Mr. Chairman.

THURSDAY, FEBRUARY 29, 1996.

ROBOTICS TECHNOLOGY DEVELOPMENT PROGRAM

WITNESS

DAVID K. WEHE, ASSOCIATE PROFESSOR OF ENGINEERING, UNIVERSITY OF MICHIGAN

Mr. MYERS. Next is David Wehe, if you will come forward, please. You have been here enough times I should know how to pronounce your name, but I apologize. David Wehe is Professor of Engineering at the University of Michigan.

We got Georgetown out of the way, so let's go up to the Big 10.

Mr. WEHE. That is correct.

Mr. Chairman, thank you for allowing us once again the opportunity to testify before this subcommittee. I am David Wehe, from the University of Michigan, and my colleagues joining me are Professor Tulenko, Jim, from the University of Florida; Professor Wood, from the University of New Mexico; and this is Del Tesar, from the University of Texas.

We normally have the University of Tennessee represented but his wife unexpectedly gave birth yesterday. This is something that doesn't happen in robotics. They come on time.

Mr. MYERS. That is another miracle.

Mr. WEHE. It was just ahead of time, let's say.

If you remember, the University of Michigan's research program in robotics has as its focus the goal of developing intelligent mobile machines which can perform work in hazardous environments and reduce human exposure to risk. This practice has been around since fiscal year 1987, initiated by DOE, and it is funded this year at $3.5 million.

This group of universities are supporting DOE's robotics technologies program and works very closely with the national laboratories. The URPR has been strongly supported by this committee since its inception and we really welcome the opportunity to be in front of you again this year.

We are going to talk about our core values, because these are important to us. They are technology innovation, education, and DOE mission impact. When we try to measure technology innovation, that is a hard thing to do, but a measure of the intellectual measure and innovation is technical papers, and this group here has generated about 500 of them, and that is quite a substantial amount; a couple dozen patents; and national robotics championships. And the awards that we have garnered can go on, and on, and on. The progress has been tremendous.

We still have a long ways to go, and it is sometimes discouraging to us, until we realized it is millions of years of human evolution we are trying to put together in a decade or so of work. I think we have made good progress. Significant advances in strategic national technology of intelligent mobile machines is one of our core values.

Education is a second core value, and we have awarded 160 advanced degrees so far in technical engineering areas. Speaking parochially from Michigan's point of view, this is an important number because the Detroit area papers are reporting that the population of the technically educated work force is projected to be too small to support our current industries due to projected retirements. So this program is good because it stimulates our youth, who get excited on technology, come from rural, urban and innercity schools, and they are attracted to important programs and become undergraduates in technical fields. So education is a core value.

Finally, DOE mission impact. And this is always exciting to us because this year—we always work shoulder to shoulder with the national laboratories, and this year some of our projects are actually involved in the dismantlement of the ANL nuclear reactor CP–5, using ROSIE. ROSIE is named after the Jetsons' maid, you may have seen that, except she looks more like a small car and she has two very large dextrous arms that can do quite a bit of damage. So CP–5 will be disassembled and we are participating in that.

And SWAMI, which is the autonomous mobile inspection robot we are working on. Dual arm manipulators. Texas delivered a robotic handling system to Los Alamos, and so forth.

How have we done? The national laboratory coordinators got together and ranked all of these universities as outstanding, top ranked, in terms of quality, quantity, and timeliness. So in contributions to the DOE mission, one of our core values, we think we are doing good.

We think these core values are shared in this committee and we think we are doing it very efficiently, but we do have one self-imposed milestone that we are not going to make. You see, Mr. Chairman, we thought that we could develop intelligent mobile machines to the point where we could get them here in time to replace the retiring Chairman. After all, the House is a hazardous environment these days. So a mobile robot might be good.

Unfortunately, we have not been able to teach our robots your broad wisdom and sagacious leadership in time. We were just unable to find anyone else with such qualities in such measure to teach the robot. So, in closing, thank you for your support of this program and we wish you well in your retirement.

[The statement of Mr. Wehe follows:]

February 29, 1996

DOE UNIVERSITY RESEARCH PROGRAM IN ROBOTICS -- Integrating Research, Education, and DOE Mission Support

Testimony presented to the Energy and Water Development Subcommittee on Appropriations

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Professor David K. Wehe
University of Michigan

The U.S. Department of Energy has provided support to the DOE University Program in Robotics during the period FY'87-FY'96 to pursue long range research leading to the:

``development and deployment of advanced robotic systems capable of reducing human exposure to hazardous environments, and of performing a broad spectrum of tasks more efficiently than utilizing humans."

The DOE University Research Program in Robotics (URPR) is an important element of the Robotics Technology Development Program (RTDP) within the DOE EM's Office of Technology Development (OTD). The integration of the DOE University Program in Robotics into RTDP, through the full cooperation of six national laboratories, has strengthened RTDP, and has provided an avenue for the results of university research to find direct applications in problems of vital interest to DOE. This program would like to thank the committee members for their historically strong support.

Request for the Committee

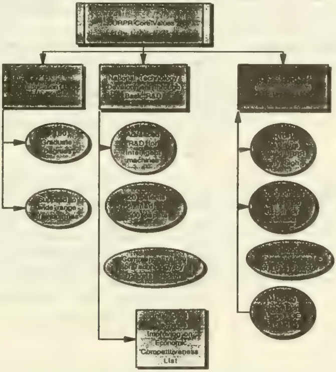
We request that the committee allocate $4 million of the Office of Technology Development (OTD) nondefense research funds to continue the University Research Program in Robotics (URPR) efforts toward the development of safer, less expensive, and more efficient robotic technology for environmental restoration, and waste management.

Developing Advanced Robotics for DOE

Develop robotic solutions for work in hazardous environments

The goal of this program is to utilize and advance state-of-the-art robotic technology in order to remove humans from potentially hazardous environments. Established by DOE in FY'87, the project has produced an impressive array of technological innovations which have been incorporated into the commercial sector. This program has reached an efficient state of technology innovation and is immersed in efficiently educating the technologists and inventing our country's advanced robotic technology of the next century while meeting today's technology needs for DOE.

Core Values


URPR Core Values
National Technology Development through Basic R&D
Graduate Degrees
Support to wide range
R&D for intelligent machines
Improving on Economic Competitiveness List

The URPR continues to make a significant impact on American robotic and manufacturing technology in three core areas: education, technology innovation through basic R&D, and DOE mission support.

Robotics: strategic national technology

The Council on Economic Competitiveness compares key U.S. technological capabilities to its international competitors. Of the several strategic areas listed as an *essential need, robotics and advanced manufacturing* was one of a handful listed in critical condition in their initial study. This conclusion was also echoed in the DOD OTA technology assessment report. In addition, the 1991 Office of Science and Technology's (OSTP) National Technology Assessment listed robotics as one of the five most vital strategic technologies for government support. The national need for a concerted thrust in the development of robotics has been universally recognized.

The 1994 update to the Council on Economic Competitiveness Report shows robotics has moved from "loser" up to "weak" when compared with international competitors. The URPR has played a major role in this improvement. Through the production of advanced students and technology, the program has enhanced our long-range international industrial competitiveness. This is seen in the commercial products which have resulted from this work, the role of the graduates of this project in manufacturing, environmental, and educational programs throughout the country, and the applicability of this work to DOE's Environmental Restoration and Waste Management Program and national manufacturing programs.

This progress, if allowed to continue, will jettison the U.S. into the "competitive" leader and predominant force in this international industry.

CORE VALUE: Educating 21st Century Technologists

The URPR has educated about 200 advanced degree students in the critical engineering fields, including many with doctorates. These students have now entered the work force, and are contributing to an industrial resurgence based on intelligent machines and advanced manufacturing technology. Graduates from this project have built successful startup companies in computer vision (MI) and medical imaging (MI), video databases (CA), and intelligent manufacturing (MI, FL, TX). Society has received students educated in vital technology areas at substantially lower costs than using federally-funded fellowships.

CORE VALUE: Innovation

The URPR has produced prodigious levels of innovation in research and development. While current demonstrations reveal next-generation technologies, even more advanced capabilities continue to emerge from the laboratories. These include new types of locomotion (small flying robots, multiple degree of freedom vehicles), navigation techniques, sensing modalities (radiation cameras and laser imaging devices), environmentally hardened components (for temperature and radiation), and dextrous manipulators. These new machines have an unparalleled man-machine interface and inherent intelligence, with the capability of being able to integrate many diverse sensors simultaneously. These devices will become or inspire the intelligent machines of the next century, including smart automobiles and obstacle avoidance aids for the handicapped.

This innovation can also be seen in the following statistics:

o An estimated 20 patents filed. At the last international Mobile Robots conference, 30% of the papers presented cited the fiducial work being performed by the URPR.

o Over 500 technical papers published in technical journals and conferences.

o The URPR robot CARMEL won the National Robot Competition and was awarded the Best in What's New in Technology for 1992 by Popular Science magazine. During the 1993 National Robot Exhibition, two URPR robots worked autonomously and collaboratively to locate, move, and reorganize large objects. This was the first demonstration of autonomous robots working together to accomplish tasks at a national forum.

This project has been heralded worldwide, and praised by Popular Science, CNN News, as well as featured in technical journals, such as the Artificial Intelligence (AI) Magazine. As a measure of our progress, we have taken the results of millions of years of human evolution and squeezed them into an decade of dedication to intelligent mobile machines.

A Side Effect: Technology for Corporate America

In addition to research and education, the URPR contributes to technology transfer. The URPR's research agenda is determined through interactions with the DOE complex. This application-driven research has yielded results, which as a side effect, have lead to advancements in the commercial sector.

The list of URPR technology transfer successes include radiation imaging cameras which can be purchased commercially from RMD, techniques for ultrasonic noise rejection and a multiple degree of freedom vehicle which is marketed by HelpMate Inc. In addition, technology transfer is in process through joint SBIR grants with small businesses (TRC, RMD, Schilling, Bonneville Scientific, REMOTEC, Sopha Medical), and joint research projects (e.g., RedZone Robotics, Inc.).

Private industry still lacks the ability to undertake the long-range R&D programs which lead to these commercial successes. Although problem-specific solutions to DOE problems tend to be too narrow for broad commercial interests, the URPR is particularly proud of its success in transferring innovations into viable commercial products, and will continue to pursue this flow whenever appropriate.

CORE VALUE: DOE Mission Contribution – Environmental Cleanup

The motives for undertaking a comprehensive research effort in the application of advanced robotics to EM tasks in hazardous environments reflect both economic considerations and health and safety concerns. As part of RTDP, the URPR is contributing to minimizing risks to human health, enhancing workers safety, reducing secondary waste, and protecting the environment. The URPR supports needs-driven applied research to develop innovative and synergistic technologies in support of RTDP thrust areas: Cross-Cutting and Advanced Technology (CC&AT), Contaminant Analysis Automation (CAA), Decontamination & Dismantlement (D&D), Mixed Waste Operations (MWO), and Tank Waste Retrieval (TWR).

During FY'96, the URPR projects involve the:

1. deployment and testing of SWAMI, an autonomous inspection robot for Fernald,
2. design, construction and testing of a robot which can precisely map large DOE facilities, such as K-25, in preparation for D&D,
3. delivery of a robotic handling system for an automated chemical and radiological analysis system, and
4. actual dismantlement of the ANL nuclear reactor CP-5 using ROSIE, a large mobile robot with two 7 degree of freedom arms for heavy-duty manipulation.

The URPR was unanimously ranked as providing outstanding technical contributions and value by the RTDP coordinators and DOE Program Manager.

As part of the D&D effort, robots equipped with advanced sensors and controls are being designed and built to perform surveillance, characterization, decontamination, and dismantlement of high radiation facilities which have been targeted for decommissioning by DOE. During FY'97, we plan to continue our strong support of the DOE EM applications, while continuing our commitment to basic research and education.

Cost Efficient Technology Generation

National policy has focused on economic growth and world leadership in science and technology. In concert with these thrusts, the URPR efficiently integrates education, research, and technology transfer in a natural and effective way. By integrating DOE needs, research, education, and technology transfer as a continuous project process, a new and cost-effective paradigm for DOE programs is being proven.

Program Request

During FY'96, the URPR provided vital contributions to education and research while meeting DOE technology needs. The motivation for this project remains steadfast -- removing humans from hazardous environments while enhancing safety, reducing costs, and increasing productivity. The program has added another university to meet DOE's increasing need for Mission Support, and so we are suggesting a slight increase in funding for FY'97 from $3.5M to $4.0M.

Request for the Committee

To continue this vital program, we request that the Committee include the following language into the FY'97 Energy and Water Appropriations Bill:

The committee allocates $4 million of the Office of Technology Development (OTD) nondefense research funds to continue the University Research Program in Robotics (URPR) efforts to develop safer, less expensive, and more efficient robotic technology for environmental restoration and waste management.

Mr. MYERS. How much did you want?

Mr. WEHE. We wish you very well in your retirement, sir.

Mr. MYERS. Well, thank you very much. There are three members of this committee who are going to retire. Maybe others as well.

You talk about what it takes to be here. Hazardous pay is not one of the benefits of the office, either. It is quite hazardous sometimes. Thank you for your testimony.

THURSDAY, FEBRUARY 29, 1996.

ENVIRONMENTAL RESTORATION AND WASTE MANAGEMENT

WITNESS

HON. RICHARD "DOC" HASTINGS, A REPRESENTATIVE OF CONGRESS FROM THE STATE OF WASHINGTON

Mr. MYERS. Our colleague Doc Hastings from Washington State. Doc, we will be pleased to hear from you. Your prepared statement will be placed in the record and you may proceed as you care to.

Mr. HASTINGS. Thank you, Mr. Chairman. I appreciate the opportunity to meet with you again this year. If you recall, last year my principal areas of concern were the Hanford Nuclear Reservation, and the area surrounding that, and the Yakima River Basin.

Last year, when I testified before you, I suggested that there could be some savings made at the Hanford area. Specifically, one area was a Federal building that cost initially, 30 years ago, about $8 million. There was a proposal to repair that building for three times the money, about $25 million. I thought that was a little high and toured the facility and the end result is the repairs that were needed in some areas totaled somewhere near $10 million.

So I thought there were some areas that we could indeed be prudent with our taxpayer dollars. But there is ongoing need, of course, to continue cleaning up the Hanford Nuclear Reservation because that was such a big part of our effort to win the Second World War and the Cold War. We have had some successes there.

Those successes have come, in many respects, because the Department of Energy has changed the way they are contracting. They are going to more performance-based contracts rather than the old DOD model and as a result we have had some great successes. But we need to go obviously farther and we need to get the job done. Let me just touch on a couple of areas where we indeed have just by changing some of the ways we are working. We have some charts. We will look at the top one there.

In the low level disposal cost, from 1992 to 1996, just because of innovations that have been tried in different contracts, we have reduced the costs there by 75 percent, from $80 to $20 per ton, just to give you an idea. In just the low level waste area alone by new innovations.

The tank waste disposal, we have 55 million gallons of hazardous and nuclear waste, and in 177 tanks. The Department has changed the way they have contracted and, as a result, in 1995, they estimated that it would take approximately $40 billion to clean up those tank wastes. Now, just because of privatizing and changing the way they are working on the tank waste, they estimate that it will take $27 billion over 37 years. So there is a huge savings just on the tank waste.

Finally, the fuel rod disposal, the spent fuel rods that have been stored near the Columbia River. Last year, they estimated that it would take $1.1 billion to safely dispose of those fuel rods. Because they had some innovations there, allowed some decisions made on site, that cost now is estimated at $727 million over 6 years.

The point I am making is because the Department has changed the way they are working, giving more authority at the site, we are getting a better bang for our dollars. We only are starting, however.

I have legislation that is not related to you, but it is in line with what we have been trying to do for the last year and that is statutorily go to performance-based contracts. That is the way the real world works anyway, and I congratulate the Department for at least starting that process but we want to put that in statute.

We would like to streamline the regulations out at the Hanford area. In fact, all nuclear sites. We are working on that through the Superfund area and, hopefully, we can get that accomplished also. We also need to drive more decision making back to the sites. That is part of the success that we had at the K-Basins and with the tanks because of the decisions being made there rather than in Washington, D.C.

We would like to see some transferring again at the sites of dollars, where they need be, rather than making a decision out there, coming back to headquarters and then going back out again. That just costs so many dollars sometimes. And there is one area of transferring nitric acid that cost several million dollars because it wasn't done on site, for example.

Finally, privatization. That is the overall thing of letting private industry go in and work, and we will see some success on that. So you can help, obviously, by having the level of funding that recognizes these innovations, but you can also help when we get the other legislation working its way through the process to help what we are trying to do.

In the future, there is one project that is nearly complete, and that is the Environmental Molecular Science Laboratory, EMSL. I can never say what it is, but it is a new scientific lab that is the state-of-the-art in environmental cleanup. Obviously, with Hanford being one of the major areas with the waste out there, they are on the cutting edge. So that needs to be completed.

And, finally, let me talk about one area and that is the Yakima River enhancement. That was started by your old colleague years ago, Sid Morrison. It was finally authorized in 1993 and the first process started this last year.

The Yakima River Basin in central Washington is really an arid area. You would not know it this year, we have had floods out there. But that points out the need of this legislation, because, unfortunately, all that water is running down the river and it is not being stored.

The last storage we built on the Yakima River Basin was 60 years ago, and yet that is a major bread basket for a whole variety of crops, not the least of which is apples, wine grapes, hops, and all those good things. But, unfortunately, we need to build more storage, and that is what the authorization that was started in 1993 is all about.

The proposal this year is for $6 million to keep that process going, and I would certainly encourage that. A lot of my constituents, like I say, seeing that water running through the river and not being able to store it when you are going into a drought area is something we would like to have.

So with that, Mr. Chairman, I appreciate your consideration and I also would like to congratulate you and the staff for working with my staff as we go through this process.

Mr. MYERS. Well, thank you, Doc.

[The statement of Mr. Hastings follows:]

STATEMENT OF THE HONORABLE DOC HASTINGS
SUBCOMMITTEE ON ENERGY AND WATER APPROPRIATIONS
FEBRUARY 29, 1996

Mr. Chairman:

Thank you very much for taking the time to meet with us this morning. I have appreciated the opportunity to work with you during the past year on a number of issues affecting my district and my home state

I want to begin my testimony by relating a success story--an actual example of reduced federal spending. Last year I asked for your help in cutting funding for a federal project in my district.

As you may recall, the GSA had planned to spend as much as $25.6 million on repairs to the Richland Federal Building, which was built in 1965 for only $8.2 million. Last March I visited the building and reviewed the General Services Administration's proposed renovations. I concluded that, although certain aspects of the project were necessary, much of the work was not essential. As recently as March 1, 1995, GSA justified the project by arguing that it was needed to accommodate nearly 1,400 DOE employees. And in a letter dated June 10, 1994, one federal official argued that Hanford expected "an influx of personnel in FY 1995 that would place additional stress on the inadequate facilities currently being utilized." Given the Clinton Administration's 31% cut of the Hanford workforce, these increases are no longer likely. And current DOE employees now total only 570, not the 1,400 once planned.

I'm happy to report that progress has been made on this front. I worked with the GSA to have them re-estimate which repairs and upgrades were actually needed, and as a result, funding was reduced by the House and Senate Appropriations Committees. This will save our taxpayers $15 million--a 60% reduction in project funding.

The Subcommittee has also been concerned over the past several years with the Department of Energy's oversight of its cleanup budget. I have shared these concerns. In fact, before I was elected, I was arguing that we needed to implement dramatic reforms in the EM program, streamlining operations and making it's management more efficient. That position was not always popular with everyone in my Congressional district, but I believed that it was critical to ensuring both that we spent the taxpayers' money effectively and that we begin to make progress cleaning up the nuclear materials created during our World War II and Cold War defense efforts.

In some ways, and in some areas, I believe that we are beginning to make progress, and I would like to share a few examples with you.

Last March, the Department of Energy renegotiated the Hanford Management contract from the traditional DOD cost-plus type of contract to a performance or incentives-based contract. Results are already apparent.

Just last week, we learned that the cost to dispose of low-level radioactive waste at Hanford has fallen by 75% since 1992. In fact, the cost per-pound has fallen from $80 to less than $20. That is illustrated by the chart I have here today.

As you know, the largest project in the DOE complex over the next few years will be the removal of the nearly 55 million gallons of waste stored in Hanford's 177 enormous underground storage tanks. Many of these are single shell tanks built in the mid-1940s, and several of them have leaked in previous years. The Department has tried for nearly ten years to build its own disposal or vitrification system, but with little success. Finally, the DOE has agreed to open the project up to the private sector. A request for proposal was circulated last week, and many of the world's most experienced corporations will be bidding on it. Experts believe that using the private sector could save 30% off of the current $40 billion estimate--a $13 billion savings.

The second largest project on the site--the K-Basins--has been totally restructured over the past year. The new plan will save $350 million over six years, and will ensure removal of nuclear fuel rods from the basins next to the Columbia River four years early. They did this by eliminating some regulatory hoops, granting control of the decision making process to the local officials, and cutting out an interim "wet" storage step.

Plus we're doing more with less. You may not know it, but our Hanford workforce has been cut dramatically this past year. It has already been cut by 26% since last January--nearly 5,100 people have been laid off. And the Department just announced that between 650 and 1,100 more of my constituents will lose their jobs by October 1. That's nearly a 31% cut in our workforce. This has not been an easy year for our local communities. We need your help to ensure that further cuts do not have a negative impact on our efforts to remediate the tons on nuclear waste in our state. We ask for your assistance to ensure that we are able to leverage our DOE technologies and assets to help transition our economy and reduce the devastating impact of these huge layoffs on our workers.

Having said that, I want you to know that I agree with the Subcommittee that we can and must make better use of our resources. And there really are five keys to doing more with less.

+ Performance based contracts. Under these types of contracts, the government would only pay for what it gets. If a contractor makes progress, he gets paid. If not, he doesn't. Last year's renegotiation of the Westinghouse contract put us on this path, and this year's complete rebid of the Hanford contract will take us further down that road.

+ Streamlining regulations. This includes three specific areas:

    + Reducing burdensome and outdated DOE orders and guidelines.

    + Using a "single regulator" for cleanup projects.

+ Reforming Superfund. We need your help to pass H.R. 2500, the Reform of Superfund Act authored by Chairman Oxley.

+ Putting more of the decision making authority in local hands.

+ Grant site officials more flexibility with funding. The Speaker's Task Force on Nuclear Cleanup took a long look at this issue last year and concluded that among the prime factors of the high costs associated with cleanup activities are the lengthy delays imposed by DOE/HQ in reviewing reprogramming requests. Many are delayed by six, seven, or even ten months or more. Some have suggested limiting DOE/HQ to 30 days to review requests from site managers to reprogram funds. Others have proposed allowing a site manager to transfer up to 10% of funds from account to account. This would not only speed up the process, but also give managers and program officials an incentive to try to save money on cleanup projects.

+ Privatization of activities, like the tank farms. The Department has made excellent progress on this particular project. We must ensure, however, that the DOE follows through on its promise to let the private companies devise and supervise the process, and keep DOE oversight and micromanagement limited to safety and reviewing the product.

Each of these principles was supported by the Task Force appointed by the Speaker. Many of the ideas also cropped up in last month's report by the National Academy of Sciences' Research Council. Many are supported by the Defense Nuclear Facilities Safety Board and by the Department of Energy as well. Other private groups and coalitions, including the Hazardous Waste Action Coalition, which has put out an excellent synopsis on these issues, have also come to many of the same conclusions.

This Subcommittee will be reviewing the Administration's request for funding for the Environmental Management Program. As you recall, the Conference provided $5.5 billion for EM activities in 1996. I understand that the Administration is considering requesting an equivalent amount for 1997.

As I have previously mentioned, there is certainly room for improvement and increased efficiency in the EM program. But without enacting significant changes in the regulatory and management process, budget cuts alone will only serve to slow cleanup in the short run, and likely drive up costs in the long run.

I still believe that the Department has not yet shown nearly enough initiative in reducing its headquarters bureaucracy. As an example, Tom Grumbly told me last year that it was essential that job reductions at Hanford take place over a matter of months. That meant that nearly five thousand of my constituents were laid off with almost no notice last year. Yet Tom testified before the Commerce Committee last October and indicated that reductions at headquarters would be accomplished over a three to five year period in order to take advantage of normal attrition. That seems to my constituents to be more than a bit of a double standard.

Until the Administration makes a formal budget request, it is obviously difficult for me to either support or oppose their figure. I would hope that the Committee would work with me, and with my colleagues who represent the other major DOE sites, to ensure that funding is not reduced for important site cleanup and technology development activities. These have already absorbed serious cuts in the past year. Any reductions should be focused on the headquarters bureaucracy--which to this point appears to have escaped almost without a scratch, in spite of the rather tough report language inserted in last year's conference report. I am concerned that the Department seems to be skirting the Committee's recommendations. I have heard anecdotal evidence that DOE is simply shifting its headquarters staff to the sites, rather than actually cutting these positions.

There are also several ongoing science and research projects for which I ask your support. I believe that we need a stable and agressive program for the DOE's research and development budget. This is critical to the scientific underpinnings needed to develop cost-effective technologies for environmental cleanup. Equally important is that we provide the final year of funding for the Environmental Molecular Sciences Laboratory, whose mission was endorsed in last year's "Galvin" Report on the National Laboratory System. The EMSL will be an international facility that will be used to find technological solutions to environmental problems at our DOE sites. And it is these technologies that offer us the real hope to reduce cleanup costs, and to spin off technologies to the private sector. The type of cooperative approach that is envisioned by Battelle's laboratory is exactly what we need as we enter the next century.

Much remains to be done, but I believe that we're beginning to turn the corner.

Also very important to Central Washington is expeditious implementation of the Yakima Basin Enhancement Act. Authorizing legislation for this project passed both houses of Congress and was signed into law by President Clinton in 1994.

This Bureau of Reclamation project is designed to improve irrigation efficiency along the Yakima River. The Yakima Project delivers irrigation water to approximately 462,000 acres of land along a 200 mile stretch of the Yakima River in Central Washington. This has been of extraordinary benefit to the Yakima Basin area, which is economically dependent on agriculture, producing over $760 million in products per year. Because the area is extremely dry, receiving as little as 10 inches of rain per year, the Yakima Basin has historically depended on large amounts of irrigated water.

In recent years, a deteriorating water supply both in quality and quantity, has threatened not only the basin's commercial agriculture and food processing industries, but also fish, wildlife, timber, tourism and recreation within the community. An outdated 80-year old reservoir system no longer meets today's demands. In addition, insufficient water supplies have also led to depleted salmon runs and declining water quality.

The Yakima Basin Enhancement Project is an economically and environmentally sensible solution to this problem. Funding for this project this year would be used for discharge modification at the Kachess Reservoir and Dam, leading to an additional 9,000 acre feet of water for irrigation. A full scale conservation program increasing water for irrigation as well as instream flows for salmon would also be implemented for the first time. Through these and many other innovations to the system, the Yakima Enhancement Project hopes to meet its goal of conserving 40,000 acre-feet of water per year within 4 years and 110,000 acre-feet within eight years.

This project has the overwhelming support of the local community including the Yakama Indian Nation, agricultural producers, environmental groups, business and financial institutions, utilities, and local schools. It also has strong bipartisan backing in Congress. This multi-year project received initial funding in FY 96 of $1.5 million. The second year funding request for Fiscal Year 1997 is $6 million. I urge this subcommittee to accept this request.

Another item that I would like to bring to this subcommittee's attention is the effort underway to refinance Bonneville Power's debt. I have already introduced legislation which would clarify the uncertainty surrounding the future of the Bonneville Power Administration (BPA) and ensure its ability to provide inexpensive and safe electric power for the Pacific Northwest.

My legislation raises the interest rate paid by BPA on its current government debt from 3.4 to 6.7%. To cover the cost of refinancing, BPA will pay $100 million to the U.S. Treasury. In return for accepting a small increase in rates up front, BPA customers would be protected from future rate hikes.

I am happy to notify this Subcommittee that in testimony before the Senate Energy Production and Regulation subcommittee of the Senate Energy and Natural Resources Committee, on March 21, the Administration supported enactment of the Senate companion bill, S. 92. In addition to Administration support, this legislation is supported on a bipartisan basis by the Northwest delegation. It solves a long-standing issue regarding perceived interest rate subsidies to Northwest ratepayers.

The legislation has widespread support by all types of BPA ratepayers, including the Direct Service Industries, publicly-owned utilities, and investor-owned utilities. Northwest ratepayers support this proposal because it ends repayment reform risk and increases Bonneville's financial stability and competitiveness over the long-term.

By eliminating exposure to such increases, this legislation substantially improves the ability of BPA to maintain its customer base. At the same time, the legislation provides a framework for BPA to make timely and full payments to the U.S. Treasury. Because the bill causes both BPA's rates and its cash transfers to the U.S. Treasury to increase, it is a net benefit to the U.S. taxpayer and would reduce the deficit by $45 million over five years and $100 million overall.

I bring this matter to the Subcommittee's attention not because my proposal needs federal funds. On the contrary, because BPA refinancing is a net gain to the U.S. Treasury, I would hope this committee indicates its strong support.

Another area where reductions in spending must take place is in the Bureau of Reclamation's water spreading budget. In recent years, the Bureau has attempted to restrict and even eliminate the use of so-called "unauthorized" irrigation water from federal projects in Central Washington.

This practice, commonly referred to as water spreading, has resulted from the fact that our irrigation districts in Central Washington are returning hundreds of thousands of acre-feet of water per year back to the Columbia River through irrigation district wasteway and other technological advancements. With increased irrigation technology and the change to Pressurized Sprinkler Systems, 30 percent water savings are common. At the same time, Pressurized Irrigation Systems have enabled Central Washington irrigators to efficiently water land at any elevation.

These additional acres being irrigated with saved surplus water, better known as Water Service Contracts (WSC), were applied for by local farm families and granted by the irrigation districts with the full support of the Bureau of Reclamation. It is incomprehensible to me that this agency would now turn around and renege on its original commitments to our farmers without providing adequate compensation.

The total withdrawal from the Columbia River for agricultural purposes is now 3 percent. Restricting an additional 1/2 of 1 percent to prevent so called water spreading will have no meaningful effect on the survival of salmon on the Columbia River. However, such a policy will have a devastating impact on Franklin, Grant, and Adams Counties, which are heavily dependent economically on agriculture. The BOR's efforts to eliminate water spreading is precisely the kind of misguided policy that must be subjected to a thorough cost-benefit analysis. I would urge the Subcommittee to strike all funds for this misguided policy until this study takes place.

Again, I appreciate your continued willingness to work with us on these issues. I want to especially thank your staff for being responsive to our calls and requests.

Speaker's Task Force
on
Nuclear Cleanup and Tritium Production

REPORT TO SPEAKER NEWT GINGRICH

"THE TOP 20 WAYS TO TURBOCHARGE DOE CLEANUP."

AUGUST 4, 1995

Speaker's Task Force Membership

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Dan Schaefer
Mike Crapo
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Todd Tiahrt
Zach Wamp
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Joe Skeen
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Jim Bunn
David McIntosh
Mark Sanford
John Boehner
John Ensign
Mac Thornberry

Speaker's Task Force on Nuclear Cleanup

"Top 20 Ways to Turbocharge DOE Cleanup Efforts."

Summary:

1) Delegate regulatory authority over CERCLA to States.
2) Streamline or eliminate Superfund's "ARARS:" Applicable, Relevant, and Appropriate Standards.
3) Consider final land/resource use before making remedy selections.
4) Utilize risk-assessment and cost-benefit analysis.
5) Include various RCRA reforms in Superfund reauthorization.
6) RCRA: Amend allowable storage definition.
7) RCRA: Consider reform of "mixture," "derived-from," and "contained-in" rules.
8) RCRA: Consider reforming the Atomic Energy Act Exclusion.
9) Integrate NEPA with other state and federal actions.
10) Encourage streamlined technology permitting process.
11) Streamline enforcement of health and safety regulations at sites.
12) Grant broad decision making authority to local DOE site managers.
13) Streamline and localize DOE order process.
14) Reform federal indemnification procedures.
15) Expedite opening of the Waste Isolation Pilot Project.
16) Eliminate statutory metric system requirements at sites.
17) Leverage federal resources by allowing long-term privatization under incentives based contracts.
18) Ensure stable but flexible budgets for cleanup sites.
19) Pass legislation to streamline the procurement process.
20) Include these provisions on a test or demonstration basis at one or more sites.

THE "TOP 20" WAYS TO TURBOCHARGE DOE CLEANUP.

Introduction:

Speaker Newt Gingrich appointed the Task Force on Nuclear Cleanup and Tritium Production to review the Department of Energy's efforts to remediate nuclear and hazardous wastes at federal sites. (Tritium recommendations will be contained in a later report). In response to the Speaker's mandate, the Task Force sought to determine why the program has been beset by such a series of delays, cost overruns, and inefficiencies.

The Task Force also was asked to consider how a reformed cleanup program might function as the Department comes under increasing pressure to downsize, particularly at Department headquarters. (DOE Assistant Secretary Thomas Grumbly has already suggested in a July, 1995 letter to Senator Pete Dominici that he could reduce EM headquarters costs by nearly $180 million). The Task Force recommendations are also designed to remain applicable should Congressional efforts to eliminate the Department succeed.

Recent reports by the Senate Committee on Energy, the General Accounting Office, and local stakeholder advisory groups, have suggested that the Department of Energy's cleanup program at former defense nuclear sites is in need of reform.

Many have noted that more resources have been spent on studies, evaluations, analyses, reports, reviews, and overviews than on actual environmental cleanup. These excessive administrative and overhead costs consume funds that would be better spent on remediation activities.

In addition, those cleanup activities actually undertaken at sites often prove demonstrably more expensive than need be. Even DOE Assistant Secretary for Environmental Management, Tom Grumbly, has acknowledged that cleanup costs at many sites are far higher than similar private remediations. In the Task Force's view, it is difficult to overstate the scope of the problems that the nation's nuclear cleanup program faces.

It is important to note that the Task Force believes that the federal government has a responsibility for completing the eventual cleanup of lands used during World War II and the Cold War for defense nuclear production. But the Congress also expects that these dollars will be spent in the most efficient manner possible.

Background:

No single factor has led to our current situation. Rather, several have contributed to the problem.

- From a management perspective, over the past several years the Department has failed to act to ensure that DOE headquarters is a productive team player, contributing to expedited cleanup activities. Secretary Hazel O'Leary committed early in her tenure to ensure that decisions would be made "where the rubber meets the road." Unfortunately, several site officials have contended that her subordinates have frequently ignored her direction, and headquarters has increasingly stood in the way of common sense progress at cleanup sites. Department officials should follow through on Secretary O'Leary's new plan--embodied in her strategic realignment plan announced on August 3--for empowering site decision makers

- From a statutory perspective, previous Congresses deserve much of the blame for not acting sooner to address the serious problems the Department and its cleanup contractors face as they work to address the ongoing legacy of the Cold War. The built-in inefficiencies of these statutes have without question delayed cleanup activities and driven up their costs. The result has been that political support for annual appropriations has been falling precipitously, a fact which now threatens essential cleanup funds.

- From a regulatory perspective, there are simply too many actors on the cleanup stage. The Environmental Protection Agency, the Department of Energy, the Defense Nuclear Facilities Safety Board, individual state regulatory agencies, in some cases local agencies, independent advisory groups, and countless others offer often conflicting advice, recommendations, or requirements. While their intentions are usually good, they have contributed considerably to the delay, inadvertently causing greater danger to the environment and to workers and residents.

- From a contractor perspective, the Department has only recently begun to move away from the types of cost-plus contracts employed for most of the Cold War, and to incentives based contracts which reward efficient delivery of cleanup services.

These are, of course, only a few of the many problems facing DOE site cleanup. But addressing them in a comprehensive manner will ensure that federal taxpayers get a far better "bang for their buck," not to mention more environmental cleanup, more worker safety, and more economic growth for affected communities.

Recommendations:

The Task Force recommends that Congress act this year to pass the following changes to federal laws, Department policies, or Congressional procedures.

1) Delegation of Regulatory Authority Of Superfund. The Task Force recommends granting regulatory authority over federal actions taken under the Comprehensive Environmental Response, Control, and Liability Act (CERCLA) to qualified state agencies. The Task Force also endorses recommendations made by Subcommittee on Commerce, Trade, and Hazardous Materials Chairman Mike Oxley which would use federal liability provisions at NPL sites, use federal remedy selection provisions at NPL sites, allow transfers of uncontaminated property and allow uncontaminated land to be excluded from being listed as part of an NPL site.

At federal DOE sites, there has been frequent and debilitating overlap of federal CERCLA and state RCRA activities. Often, both statutes have been applied in full to a single cleanup activity, adding to costs and delaying cleanup. The Task Force believes that since RCRA authority is often the only tool that state agencies have for becoming involved in cleanup, states tend to use this authority at every opportunity, even if more appropriate CERCLA actions are being undertaken by federal agencies. Allowing state control over both statutes will eliminate this built-in incentive to pursue corrective actions under both statutes. These reforms have been supported by the Department of Energy, the Department of Defense, and by several members of the House and Senate.

2) Superfund: Applicable, Relevant, and Appropriate Standards. The Task Force recommends that, at a minimum, the Congress endorse the Clinton Administration's proposal (contained in last year's Superfund reform legislation, H.R. 3800) to eliminate relevant and appropriate standards from CERCLA. Eliminating applicable standards as well would, however, go even further towards reducing duplicative standards and actions taken during cleanup activities.

Reforming or eliminating Section 121 of CERCLA--the infamous ARARS--is a top priority of a long list of cleanup contractors, state regulatory agencies, and members of the House and Senate. These regulations impose standards not designed for nuclear or hazardous wastes remediation efforts on federal sites, and frequently require duplicate actions already taken under more appropriate statutes. Streamlining Section 121 would singlehandedly lower costs and increase cleanup actions taken at most--if not all--federal sites.

3) Final Land Use. The Task Force recommends that final uses of land, as well as groundwater and other resources where appropriate, be determined at each site in an expeditious fashion and that these decisions play an integral role in determining remedy selection. The Task Force recommends that the appropriate Committee consider establishing on a test basis at one or more sites an integrated land use council, consisting of one member from state, local, and federal governments, pursuant to Sec. 9 of H.R. 2110. However, state and local communities should be able to object to this formula if they believe it to be inappropriate for their particular situation.

A number of witnesses have suggested that unreasonable final use determinations have driven cleanup costs upwards in areas where even the expenditure of tens of billions of dollars would fail to provide an environment free from risk. Thus, the failure to take into consideration land use actually drains resources from remediation and cleanup activities in areas where actions have a much greater likelihood of success. Similar reforms are supported by the Department and by several members of the House and Senate.

4) Risk-Assessment and Cost-Benefit Analysis. The Task Force recommends that flexible risk-assessment and cost-benefit analysis criteria be required at sites in order to ensure the best use of federal tax dollars. Similar rules must also be required of any state which elects to assume regulatory control over CERCLA.

A joint Department of Defense/Department of Energy briefing to Congress in July included a proposal to "use risk based ranking of site work." This is essential. Priorities must be determined, and resources directed to those areas which pose the greatest risk to local populations and the environment.

In the same vein, the Departments recommended that Congress "include reasonableness and cost-effectiveness as statutory remedy selection criteria--not only in regulations."

H.R. 2110 includes language requiring that the site manager and state regulator complete risk-assessment and cost-benefit analyses during consideration of possible remedy selections at a particular site. The language also requires that the site manager certify that there is "no alternative remedy that is allowed by the statute that would achieve an equivalent reduction in risk in a more cost-effective manner." The Task Force believes that this language would help ensure that our tax dollars are invested wisely at cleanup sites.

5) RCRA: Include Reforms in Superfund Reform. The Task Force strongly supports recommendations by Chairman Oxley to include several RCRA modifications in legislation to overhaul CERCLA.

RCRA and CERCLA are employed on a daily basis at our nation's nuclear cleanup sites. Unfortunately, neither was originally designed for cleanup of federal sites, and neither was specifically written with nuclear wastes in mind. As a result, each frequently adds unnecessarily to costs without a corresponding return in cleanup completed. Unless changes are made in both statutes, efficiencies simply will not be maximized. Several members, however, have noted that the Committees should take care to ensure that the intent of the Federal Facilities Compliance Act is protected.

Specifically, the Task Force supports the following suggestions made by Chairman Oxley:

- o Create an exclusion for remediation waste or remedial actions from: land disposal restrictions and pretreatment requirements; triggering further permitting or facility-wide corrective action requirements; and minimum technology landfill requirements.

- o Design criteria for plans would have to be consistent with the flexible approach outlined for Superfund remedies.

6) RCRA: Amend Allowable Storage Definition. The Task Force recommends that the Committee consider amending the allowable storage definition under RCRA to include temporary storage as necessary at a particular site of wastes from that site until permanent storage disposal facilities become available. Specifically, the Commerce Committee should consider amending 42 USC 6924 by adding after the word "storage:" "is necessary until appropriate, permitted treatment and/or disposal facilities become available or . . ."

In addition, remedial actions are frequently delayed or postponed because, while current practices allow DOE or its contractors to remediate wastes, the end product may still exceed published RCRA guidelines. Thus, disincentives exist to pursue even the elimination of a significant portion of risk.

7) RCRA: Reform "Mixture," "derived-from," and "contained-in" rules. Several witnesses cited problems associated with the "mixture," "derived-from," and "contained-in" rules. The Task Force recommends that the Commerce Committee consider clarifying these RCRA regulations to take into consideration risk and cost benefit considerations. Several Task Force members have suggested the following addition to 42 USC 6921: "(j) Clarification of Hazardous Waste Listings. Solid waste which has been mixed with listed hazardous waste under circumstances other than for the sole purpose of dilution, solid waste which has been derived from the treatment of listed hazardous waste, and solid waste which has become inadvertently mixed with listed hazardous waste, need not be managed as hazardous waste unless the resultant mixture or treatment residue exhibits a hazardous waste characteristic. For those listed waste components that are not addressed by hazardous waste characteristic limits, a timely determination as to whether or not the mixture should be managed as a hazardous waste shall be made based upon realistic risk and cost benefit information and other criteria as may be appropriate."

8) RCRA: Expand and clarify the Atomic Energy Act Exclusion. The Task Force recommends that the Commerce Committee explore clarifying the AEA exclusion from the definition of solid waste to cover source and special nuclear materials, and materials containing them from RCRA application. Witnesses have suggested consideration of the addition of the following sentence in 42 USC 6903: "The exclusion of source or special nuclear material includes materials containing source or special nuclear material in their entirety and spent nuclear fuel."

There is presently uncertainty and debate about whether or not hazardous waste laws apply to certain nuclear materials stored across the DOE complex--materials like spent nuclear fuel and related inventories. This issue slows progress and costs money, without a corresponding environmental benefit.

9) NEPA: Integrate NEPA process with other applicable state and federal regulatory requirements. The Task Force recommends authorizing the site manager to waive NEPA requirements where he determines that an environmental analysis and public comment period which is substantially equivalent to that required by NEPA has been conducted under another state or federal statute. This provision is included in Section 8 of H.R. 2110, which is supported by a bi-partisan group of House and Senate lawmakers.

Several state officials, contractors, and even federal experts have indicated that the Department frequently insists on pursuing total compliance with the provisions of the National Environmental Policy Act, even if similar public comment and evaluation provisions have been completed for the same project under CERCLA, or under an appropriate state law. This delays cleanup decisions in many cases, and often drains resources from cleanup projects. Secretary O'Leary's August 3rd strategic realignment plan also recommended streamlining the NEPA process.

10) Technology Development: Encourage streamlined permitting process for promising new technologies. The Task Force recommends that site managers be allowed to establish a comprehensive, streamlined program for testing new technologies, including a simplified solicitation and verification process at their sites. These provisions should include guarantees by the Secretary to provide for regulatory safe harbors for promising technology approved for use at a DOE site. This provision has been proposed by Congressman Ron Wyden (D-Oregon) and other members of the Pacific Northwest delegation.

11) Enforcement of Health and Safety at Cleanup Sites. The Task Force recommends that the Congress carefully review the role of the Department's Office of Environmental Health and Safety and the Defense Nuclear Facility Safety Board, to ensure that these two agencies do not overlap.

Numerous individuals, including top DOE site officials, have expressed serious concern about the burdens imposed by duplicative and often conflicting advice provided by these two organizations. The Task Force notes that the Defense Nuclear Facilities Safety Board was actually established to provide oversight for active defense nuclear production activities, most of which were conducted out of the glare of the public scrutiny that now surrounds cleanup activities. Stakeholder groups, environmental organizations, state and local agencies, labor unions, media sources, and others now have almost unlimited access to information about site activities. Thus, the Task Force questions the need for multiple federal organizations with similar jurisdictions.

12) Decision Making Authority. The Task Force recommends shifting the decision making authority for most site cleanup decisions to a Presidentially appointed site manager, similar to provisions included in Sec. 5 of H.R. 2110.

Simply put, many in Congress have lost confidence in DOE's ability to efficiently manage activities at cleanup sites from its Washington, D.C. headquarters. Three, four, and five month delays in approval of even the most basic decisions contribute immeasurably to higher costs and longer delays. In addition, the House National Security and Appropriations Committee's have recommended dramatic reductions in DOE headquarters budgets, including a reduction in support service contractor employees. And efforts continue to eliminate the Department altogether, transferring EM functions to another agency. Redirecting time critical decisions to the DOE site manager will ensure that even if the above changes occur, cleanup decisions will be able to be made expeditiously.

As previously mentioned, Secretary O'Leary appears to have recognized this problem, and on August 3rd proposed that "employees close to the work will be empowered to execute day-to-day operational responsibilities." This decision making structure should be institutionalized and strengthened pursuant to H.R. 2110.

13) Department Orders. The Task Force recommends that beginning in 1996, site managers be granted authority to streamline or revoke unnecessary orders, or impose those orders which are deemed essential for human health or the environment, or for administrative functions. Site manager decisions could be reviewed and revised by the President.

The power to impose orders is currently vested primarily in DOE headquarters. But the inability of headquarters to react rapidly to emerging threats to health or safety, or to remove burdensome orders which slow cleanup efforts is well documented. The Task Force commends the Department for its current efforts to address this problem. There appears to have been significant progress made in this area over the past few months. Over the long term, however, there is no guarantee that the cumbersome order system won't reappear. Thus, the Task Force believes that while DOE headquarters should be able to recommend orders to site managers, the site manager should have greater authority to ensure that he imposes those orders necessary to protect health and safety, as well as to perform other critical functions in an efficient and cost-effect manner.

14) Indemnification. The Task Force recommends that Congress consider enacting significant reforms in federal indemnification programs.

Critics of these efforts frequently charge that providing indemnification to contractors only encourages private companies to ignore safe waste handling practices, threatens the lives of workers and community members, and puts the environment at risk.

They fail to recognize that the current lack of adequate indemnification provisions has actually led to greater risk by discouraging innovative and aggressive private participation in cleanup activities. How many tens of millions of gallons of waste, or millions of cubic yards of contaminated soil, or metric tons of plutonium might have been cleaned had the very latest cutting edge technology been employed at DOE sites? Our current situation has resulted in a defense-minded, risk-averse approach to remediation technologies.

Several members of the Task Force have suggested that Congress enact reforms similar to those included in section 408 of H.R. 3800, as passed last year by the former Public Works and Transportation Committee.

In addition to providing indemnification for pre-existing conditions, a uniform standard of liability based on negligence could be established under federal and state law for cleanup activities. A uniform statute of repose might also be adopted, similar to those adopted by over 40 states.

15) Expedite Opening of WIPP. The Task Force recommends that the opening of the Waste Isolation Pilot Plant in Carlsbad, NM be expedited.

WIPP is a world-class facility designed specifically for the management of transuranic waste. Unfortunately, it presently sits idle. The facility costs American taxpayers millions of dollars to maintain, while related testing and regulatory hurdles are ongoing. Failure to open WIPP also costs taxpayers millions in related storage, inspections, and monitoring for waste destined for shipment to the WIPP, but which currently remain stored at numerous sites around the country. It's time to open this critical facility, and legislation introduced by Congressman Joe Skeen--H.R. 1663--would do just that. As a result, the Task Force supports the Commerce Committee's decision to move forward with this legislation.

16) Eliminate Metric System Requirements. The Task Force recommends eliminating the statutory requirement that all site activities conform to the metric system.

At the same time that federal resources are becoming increasingly limited, it makes no sense whatsoever for the Department to spend millions of dollars at each site to comply with a system that few Americans understand or support. At Hanford, workers have indicated that compiling metric drawings for a single backup tank pump may cost upwards of $1 million. Another several hundred thousand dollars is being spent to ensure that the Hanford tool shop is able to handle metric, as well as standard, equipment. These resources should instead be spent on cleanup.

17) Privatization. The Task Force strongly recommends that Congress pass legislation granting long-term privatization authority to the Department. The Task Force also strongly encourages the Department to make maximum use of incentive and performance based contracting.

A recent DOE conference on privatization concluded that several factors have hindered the expansion of private sector involvement in specific cleanup activities. In order, these were:

- The unavailability of affordable private insurance and related liability and indemnification issues.
- The inability to attract private sector financing.
- The lack of incentives for contractors.
- The uncertainty on long-term contracting, regulatory issues, and potential premature termination of contracts.
- And concerns about workforce partnerships.

Each of these issues is addressed by legislation introduced in the 104th Congress. Privatization should be a fundamental element of our nation's cleanup efforts.

18) Funding/Budget Flexibility. The Task Force recommends stable funding at nuclear sites covered by the demonstration provisions of this proposal.

Much media attention has been directed at the House reductions in the Department's Environmental Management account. However, the House noted the excessive support service contractor levels at DOE headquarters, the fact that site activities have already been reduced by 20-35%, and that the General Accounting Office has expressed concerns with the large uncosted balances account built up by the Department over the past several years.

The Task Force wants to make clear, however, that allowing state assumption of CERCLA regulatory authority should not be viewed as an excuse to insist on so-called "Cadillac" cleanup standards. State regulators must work together with site managers and Congress to ensure that in these difficult budget times, cleanup remedies are chosen which are cost-efficient, as well as effective.

The Task Force also recommends that reprogramming thresholds at demonstration site(s) be reviewed. Additional flexibility should be granted in transferring funding between important cleanup projects. This would speed cleanup, and allow the use of appropriated funds in the most efficient manner possible.

Because of the level of specificity required by the OMB and Congress in approving DOE's Environmental Management budget, it is virtually impossible for a field manager or contractor to make management decisions to transfer funds for necessary operational purposes. The problem is compounded by the $1 million reprogramming threshold required by Congress (for reference sake, $1 million is 1/1,500th of Hanford's cleanup budget Few, if any, significant Hanford projects fall below this threshold).

The consequence of this process is twofold. First, there is relatively little integration between different funding activities on the sites. Second, when funding must be transferred for critical purposes, the decision is delayed, often by months (one recent reprogramming request took nearly four months to work its way through DOE headquarters and to Capitol Hill). Duplication and redundancies are often the result.

19) Acquisition/Procurement Reform. The Task Force endorses efforts by the House Committees on Government Reform and Oversight, and National Security, to make further reforms of the federal acquisition process. The Task Force encourages expeditious action on legislation which will speed the procurement process.

20) Demonstration Project(s). The Task Force would prefer to enact the majority of these proposals to apply to all sites nationwide. Many could be passed during consideration of Superfund reform. However, others, especially the management reforms could be passed on a demonstration or test basis.

Conclusion:

The current cleanup system is broken. It must be fixed. Congress has a perfect opportunity to enact significant reforms that will not only lead to significant budgetary efficiencies, but also speed environmental cleanup at our nation's major Department of Energy sites.

The Task Force wants to reiterate the need to pass these reforms this year. Commerce, Transportation and National Infrastructure, National Security, Appropriations, and other relevant House Committees must act now to ensure that our tax dollars can be used efficiently at the nation's nuclear sites. The Task Force commits itself to working to see that these reforms are enacted forthwith.

Additional copies of this report can be obtained from the office of Congressman Doc Hastings (R-WA). Please call 202/225-5816.

Mr. MYERS. Your suggestions here on how to improve the efficiency are good, even though we don't have the authority to do these things. As we discussed last year, when we were trying to develop our budget, these are problems we have and we appreciate your efforts and wish you good luck with that.

Mr. HASTINGS. Thank you very much.

Mr. MYERS. Appreciate your testimony.

THURSDAY, FEBRUARY 29, 1996.

NUCLEAR WASTE PROGRAMS

WITNESS

KRIS SANDA, COMMISSIONER, MINNESOTA DEPARTMENT OF PUBLIC SERVICE

Mr. MYERS. Next is Ms. Sanda, Commissioner of the Department of Public Service in the State of Minnesota. Welcome back. Your prepared statement will be placed in the record and you may proceed for the next 5 minutes as you like.

Ms. SANDA. Thank you. Thank you, Chairman Myers, and members of the subcommittee. I really appreciate this opportunity to testify today, and I urge Congress to reform and to fund the civilian nuclear waste program.

I am here as the Commissioner of the Minnesota Department of Public Service, and also as one of the founding members of the Nuclear Waste Strategy Coalition, which you are familiar with. That does include the Alabama Public Service Commission, it does include the Indiana-Michigan Power Supply Company, and the closest thing I could find in New Jersey is the Niagara, Mohawk, New York State Electric & Gas Corporation and Consolidated Edison Company of New York.

Last year, I testified before this committee on the need to fund a reformed civilian nuclear waste program. I explained how American consumers all pay into the nuclear waste fund in every monthly electric utility bill. All told, American consumers have paid over $11 billion, billion, so far into this fund, and continue to pay at a rate of about $600 million every year. This money is given to you, the Federal Government, by our electric utilities to make good on the individual contracts that they have signed with DOE. Congress is supposed to appropriate this money from the fund for safe and timely storage and disposal of waste from our nuclear power plants. They produce 20 percent of our Nation's electricity.

We, the consumers, have kept our end of the bargain, but not the Federal Government. By failing to appropriate more than a fraction of our annual payments, some in Congress have effectively diverted, stolen, if you will, up to two-thirds of consumers' annual payments for other spending. Collecting money for one purpose, for the nuclear waste fund, but using it for another, and flat-out DOE program failure, has created the worst of all situations for American consumers.

This year Congress has severely cut funding for the DOE waste program, expressing legitimate concern over falling 2 years further behind every single year it operates. So what do our friends at DOE do? First, they raise the percent of program overhead, they raise cost estimates, and then they extend the repository completion, the date, out yet another 5 years to the year 2015.

Since then some in Congress have threatened to cut all funding, while still taking our money. If Congress slashes our funds, consumers cannot be expected to continue paying and paying and paying hundreds of millions of dollars for services that we do not get. Any progress will slip even further, creating billions of dollars in unnecessary costs, up to $10 billion, I figure. And that is what I am here to talk about today: Avoided costs.

Failure of the DOE program is reason for reform, but it is not an excuse for Congress to take $4.2 billion of consumer payments over the next 7 years for other purposes, creating expenses three to four times higher for us as consumers, for you as regulators and Congresspersons, and for taxpayers. Both reforming and funding the program is the only honest policy, the only sound policy, and the only acceptable policy.

We believe immediate action is necessary. Yes, in 1996. Failure of the Federal Government to meet its obligations in 1998 means radioactive waste will remain at 110 reactors in 73 locations in 34 States and at a tremendous additional cost. These costs include the building and prolonged operation of many sites instead of just one, potential early shutdown of nuclear power plants, and higher decommissioning costs.

Delaying program reform for even 1 or 2 years means real and substantial costs for our Nation. If Congress fails to authorize centralized temporary storage in 1998, as H.R. 1020 provides, it is unlikely to be addressed before 1997 or even 1998. By 1998, the Congressional Quarterly estimates that 26 of our Nation's 110 reactors' leadership have spent money for on-site storage, and from there it really gets expensive, billions of dollars will be spent, and the chance to avoid huge, unnecessary costs will be lost.

Mr. Chairman, this is leap year. I have been taught as a home ec teacher that women can propose in leap year. Therefore, I am proposing that the nuclear waste fund be used for the intention for which it was created. American consumers have put almost $11 billion into the fund. You are the trustees of the fund, our nuclear waste fund piggybank, as 60 Minutes calls it. We have kept our end of the deal: We have paid. Now our Congress must use our money for what it is for, nuclear waste storage and disposal, not for other good Federal programs. It is leap year, Mr. Chairman and I am asking.

[The statement of Ms. Sanda follows:]

MINNESOTA
DEPARTMENT OF
PUBLIC SERVICE

OFFICE OF THE COMMISSIONER

Testimony of

Krista Sanda
Commissioner, Minnesota Department of Public Service, and
Founding Member, Nuclear Waste Strategy Coalition

Presented to the

Subcommittee on Energy and Water Development
Appropriations Committee
U.S. House of Representatives

February 29, 1996

INTRODUCTION

Chairman Myers, members of the Subcommittee, I appreciate this opportunity to testify today and to alert you to the urgent need for Congress to reform, and fund, the U.S. civilian nuclear waste program.

This coming year's appropriations will have a major impact on how this country deals with nuclear waste for decades to come. Congress's action, or inaction, will determine whether the United States will fund an effective civilian nuclear waste program, or continue to squander billions of dollars to create a relatively small, temporary infusion of trust fund money into the present budget process. Failure to reform and fund the U.S. civilian nuclear waste program will create a tremendous financial burden for electricity consumers and taxpayers. Relying solely on the Federal Courts to address this has powerful, and painful, implications for the Federal budget and appropriations process.

We must take immediate steps to provide centralized, temporary storage of high-level nuclear waste. We also must reform and fund a program leading to safe, timely, and cost-effective permanent disposal of nuclear waste from our power plants.

Electricity consumers will not continue to quietly pay their money into the Nuclear Waste Fund and get nothing in return. There is a growing realization by this country's consumers, regulators, elected officials and representatives of the electric industry that we must act to change the bumbling manner in which this program has been managed over the past 25 years. New initiatives are attempting to address the management problems but it will be difficult to succeed without the commitment of this subcommittee to support the reform process with adequate funding.

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CONSUMER RIP-OFF

One year ago I presented testimony to this committee on the need to fund a reformed civilian nuclear waste program. I explained how electricity consumers all pay into the Nuclear Waste Fund in every monthly electric bill. All told, American electricity consumers have paid over $11 billion dollars to date and continue to pay at a rate of about $600 million each year. This money is passed through to the Federal Government by our electric utilities for safe keeping as specified in individual contracts they signed with the U.S.-Department of Energy.

Congress is supposed to appropriate our money from the Fund to provide safe and timely storage and disposal of civilian radioactive waste from nuclear power plants which produce over 20 percent of our nation's electricity. Consumers have kept their end of the bargain, but not the federal government. By failing to appropriate more than a fraction of our annual payments, some in Congress have effectively diverted -- stolen if you will --up to two-thirds of consumer's annual contractual payments to camouflage other spending in the budget process.

The desire to collect money for one purpose but use it for another, plus the widespread recognition of DOE program failure has created the worst of all situations. This year Congress has severely curtailed appropriations to the DOE civilian radioactive waste program, expressing legitimate concern over its falling two years further behind for each year it operates. In response, DOE raised the percent of program overhead, raised life-cycle cost estimates, and extended its target completion date for a repository another 5 years to the year 2015 or beyond. Since then, some in Congress have threatened to cut all funding -- while still taking consumers money.

If Congress simply slashes or ends appropriations for civilian high-level nuclear waste storage and disposal, it is foolhardy to expect electricity consumers to continue paying hundreds of millions of dollars under Federal contracts for services they do not get. Progress toward receiving those services would slip even further from DOE's already dismal rate, creating billions of dollars in unnecessary costs.

Failure of the DOE program is reason for reform. It is not an excuse to take $4.2 billion of consumer payments over the next 7 years for other purposes -- creating expenses three or four times higher for American consumers and taxpayers. No course of action other than both reforming and funding the program is the only honest policy, the only sound policy, and the only acceptable policy.

ENOUGH IS ENOUGH

Nuclear Waste Strategy Coalition

Two years ago consumers, states and utilities finally realized that enough is enough. They clearly saw the nature and magnitude of the unfolding debacle in the Federal nuclear waste program. Together with Michigan and Florida, Minnesota then founded the Nuclear Waste Strategy Coalition, a group of state regulators, state attorneys general, and utilities working together to push the civilian nuclear waste program toward a safe, timely, and cost-effective conclusion. A year later we had member organizations in 13 states. Today our growing coalition has 33 member organizations in 19 states, with additional members and our 20th state anticipated within days.

The Nuclear Waste Strategy Coalition is following a three-pronged action plan to bring about changes needed in the nuclear waste program. These actions include: holding the Federal government accountable for its nuclear waste disposal obligations for by initiating a lawsuit against DOE; supporting and encouraging development of private storage facilities to meet pressing immediate needs for away-from-reactor storage; and developing and proposing solutions to the problems in the current program.

DOE Lawsuit

Members of our Coalition play leading roles in the lawsuit pending in Federal Court against DOE by the states and nuclear utilities. The purpose of this suit is to hold the Federal government responsible for contracts signed by DOE promising to begin taking waste in 1998. Forty state agencies in 29 states, 25 investor owned utilities, and 8 municipal utilities have joined in this suit, demonstrating broad and deep concern with the DOE program. After two years of DOE maneuvering, oral arguments in this case were presented before the U.S. Court of Appeals in the D.C. Circuit on January 17, 1996.

It was a good day for consumers, and a bad day for DOE. At one point Judge Ginsberg asked DOE's attorney,

> "So what did they get for their money? Or is this just a giant swindle from the outset? ... They were to pay you money and you were to do nothing that you didn't want to? There is an old expression in Yiddish that translates in English to 'here's air, give me money'. That's what it sounds like."

There are widespread expectations that the Court's decision, perhaps coupled with subsequent actions, will fix responsibility for nuclear waste, including fiscal responsibility, firmly on the Federal government.

Private initiatives

Members of the Nuclear Waste Strategy Coalition have repeatedly pointed out the wisdom of having another, private volunteer program for temporary nuclear waste storage in addition to a government program. A non-government project will provide valuable technical and managerial innovation to both challenge the government program and provide it with examples to emulate. This is especially important to promoting overall cost-effectiveness.

Let me cite one example. Coalition members have been instrumental in bringing together the Mescalero Apache Nation, Northern States Power Company, and several other utilities to explore development of a private storage facility for nuclear waste. That project continues to advance and has now formed a corporate entity. Before March, 1995, DOE estimated its interim storage facility costs as being $1.042 billion. Then, after meeting with members of the Mescalero Private Fuel Storage Project and reviewing their $139 million cost estimate, DOE cut its own cost estimate nearly in half to $567 million.

In addition, if the Federal government's program fails to be timely, safe, or cost-effective, a second, volunteer site may provide a short term option, providing valuable time to form and implement a contingency plan. Such a site lowers the risk of overall program failure caused by impediments of nature, law, technology, or other factors that may be unique to a single site. It may also provide additional capacity, augmenting storage at the government program's site. For these reasons, such initiatives must continue to be encouraged and pursued.

Reform legislation pending before Congress

The 104th Congress presents the window of opportunity for comprehensive legislative reform of the nuclear waste program. Through the actions such as the states' and utilities' lawsuits against the Department of Energy, the private spent-fuel storage project, and through high-profile state cases like Minnesota's Prairie Island case, the continuing failure of the program run by the Department of Energy is becoming widely recognized. There is a widespread consensus on the need for Congressional action.

Representatives Upton and Towns are to be commended for introducing H.R.1020, The Integrated Spent Nuclear Fuel Management Act of 1995. Two hundred and sixteen (216) Congressman now cosponsor this proposal. Clearly it is time to advance this vital and comprehensive legislation to the House floor and to pass it. Senator Craig, Senator Grams and Senator Johnston must also be commended since each has introduced legislation that addresses important problems in the nuclear waste program. Their necessary and important steps have brought this critical issue to the forefront and fostered discussion in the Senate. It is my understanding that significant committee action will advance legislation there as well in the next few weeks.

Despite these encouraging and long overdue developments, we must recognize that there are powerful special interests who would prefer to do nothing. Some suggest that we are asking you to rush to judgment. If the 12 years in which we have wrestled with this dilemma is not enough time to see what needs fixing, no amount of time will be enough. Other special interests wrongly and loudly assert that reforming the nuclear waste program is a "budget buster" and that Congress has yet to find a way to pay for it. Let me make it perfectly clear that electricity consumers in Minnesota and throughout the nation have already paid, and continue to pay for civilian nuclear waste storage and disposal. This vital program reform only affects the budget to the extent that planners had hoped to divert electric consumers payments from the Nuclear Waste Fund for other spending purposes! Furthermore, reform opponents completely ignore the fact that a properly reformed program will run far more cost effectively, and there is a real risk of even greater shocks to the budget and appropriations process if Congress fails to take action now.

IMMEDIATE ACTION IS NECESSARY

Failure of the Federal government to fulfill its obligations beginning in 1998 means that for the foreseeable future radioactive waste will remain at 110 reactors at 73 locations in 34 states -- and at tremendous additional costs. If waste does not begin moving to a centralized location by 1998 additional costs will include the building and prolonged operation of many storage sites instead of a single site, the possible early shut down of power plants, and additional decommissioning expenses.

Delaying reform of the civilian radioactive waste program for even one or two years has real and substantial costs to our nation. If the 104th Congress fails to authorize centralized temporary storage for the nation's civilian radioactive waste, as H.R. 1020 provides, it is unlikely to be addressed before 1997 or 1998. By 1998, the Congressional Quarterly estimates that 26 of the nation's 110 reactors will have already made provisions for on-site storage. Spending decisions will be concluding by 1998 concerning storage for half of the nation's reactors. Billions of dollars will have been spent and the opportunity to avoid huge unnecessary expenses will be lost.

In fact, these costs are already beginning to occur and they are guaranteed to continue growing. They are not some vague and future problem. They are part of today's cash flow and the present budget and appropriation discussions. Since we only have five minutes today, let me briefly present an estimated summary of the really big costs. I trust your staff will have the opportunity in the upcoming weeks to explore these costs more fully with members of the Nuclear Waste Strategy Coalition.

THE BOTTOM LINE: COSTS OF FAILURE

First, let's look at the costs for additional storage at nuclear power plants. A sampling of data from around the country indicates that implementing dry cask storage facilities at 73 power plant locations could easily result in costs of $6 billion to $8 billion -- for the first twenty years. Unless the DOE program reverses its history of failure -- and the opening date for a repository gets closer instead of farther away with each passing year -- waste may remain at plant sites for many more decades. In addition, we should note that present DOE contracts with utilities assume an acceptance rate of 3000 MTU per year over a 45 year period. Additional costs of maintaining 73 spent fuel facilities for additional decades appears to be between $1.5 and $3.3 billion per decade. Even in the value of today's dollars, these dry cask storage costs approach, or exceed $10 billion. They would likely be even higher at the time of performance.

Associated delay of planned plant decommissioning could also escalate costs. In a paper presented by Energy Resources International at a May, 1995, NARUC meeting, it was noted that keeping reactor pools operational for extra years could add tens of millions of dollars to each facility's total cost. Costs associated with premature retirement and replacement of power plants because of the waste issue could raise costs even further.

CONCLUSION

Immediate steps must be taken toward providing centralized temporary storage of high-level radioactive waste from power plants. This must be part of an overall program leading to timely, safe, and cost-effective permanent disposal of this waste. It unlikely that this can be achieved without significant program reform, much of which is pending. But reforms are ineffective without funds to carry them out. It is imperative that money paid by consumers under contracts with the Federal government be used only for their intended purpose. Those who would divert consumers payments gain relatively little cash flow for the budget -- and only then by creating vastly larger costs to burden consumers and future taxpayers.

It will be a travesty if the 104th Congress does not seize the opportunity to avert this by passing H.R.1020 with its vital reforms and budget provisions to ensure that money collected to conduct the reformed program is used for that purpose. Similarly, I ask that this Committee keep the Federal government's bargain with America's electricity consumers. Appropriate the funds we entrust to you for nuclear waste management in sufficient amounts to ensure that there is continuity as reform of the nuclear waste program is implemented.

Mr. MYERS. Well, thank you. We can't say we have not been propositioned today, can we?

Ms. SANDA. As the mother of eight; I understand.

Mr. MYERS. We are much aware of what you have been speaking about, and have been concerned for the last 2 years. And while we are criticized for the way we spend it, we are not going to spend it foolishly and senselessly. We are concerned, as you are, because we feel a tremendous obligation to carry out the contract that has been made with the utilities and the ratepayers.

So we are very much aware and we are doing everything we can do, and the authorizing committee is, too, and I think you will see at the end of this year, I hope, progress towards that direction. So thank you for your testimony.

Mr. BEVILL. Mr. Chairman, if I may comment on that. I would just like to agree with you, and I would not blame the utilities if they just quit paying them. Force them into court on it and point out that it is not being used for what it was intended and it is wrong. There is no question about that. Just quit paying them.

Ms. SANDA. Mr. Chairman, Mr. Bevill, as you know, a number of States are starting investigations to withhold payments into the nuclear waste fund, and I have ordered such an investigation in Minnesota. Virginia, Minnesota, South Carolina are among the early States to do that.

Thank you for your time.

Mr. MYERS. Thank you.

THURSDAY, FEBRUARY 29, 1996.

ENERGY BIOSCIENCES

WITNESS

DR. LOUIS SHERMAN, DIVISION OF ENERGY BIOSCIENCES, PURDUE UNIVERSITY

Mr. MYERS. Next is Dr. Lou Sherman from Purdue University. He has made a big sacrifice. He is missing a ball game tonight. Welcome to the committee. Your entire statement will be placed in the record and you may proceed for your 5 minutes.

Mr. SHERMAN. Thank you, Mr. Chairman, from the fifth ranked Boiler Makers at Purdue.

I would first like to thank Congressmen Myers and Bevill for all the support they have given for these programs in the past and wish them well in their retirement. I am sorry to see you go and hope that you will continue your support during this year.

Mr. MYERS. We are coming home.

Mr. SHERMAN. Home to the basketball game. So that will be good.

I appreciate this committee holding hearings at such an early stage and to try to bring order out of chaos here in Washington. I appreciate the opportunity to come here so early in the year.

I speak today on behalf of the Division of Energy Biosciences. It is a small program in the Department of Energy's Office of Basic Energy Sciences. The program funds pioneering research in plant sciences and also what we have referred to as nonmedical microbiology. The division's budget for fiscal year 1996 was $30.2 million, and we appreciate everything that this committee did for that budget. We would like to request an increase for fiscal year 1997 once a formal budget is proposed.

This is a broad area of research with tremendous opportunities for breakthroughs that will potentially offer Americans a viable alternative fuel, new cost effective ways of cleaning the environment, and other new technologies. There is a wealth of opportunity available to be tapped by research in this area, and yet a full 95 percent of all the proposals towards the Division of Energy Biosciences are turned away each year because of the limited funds, and, sadly, among these, 19 out of every 20 submissions that have to be rejected, there are some brilliant opportunities that are lost. So even a requested increase would permit less than 10 percent of the proposals to be funded. So I hope that this program can be fully funded this year and that you can establish a plan that will enhance the activities over the long term.

I know one of the questions often asked here is why DOE funds basic research in plant and microbial sciences. You should remember that to the best of our knowledge, that fossil fuels such as oil and gas, which represents the bulk of our current energy sources, were originally biological material that ultimately use the sun for energy.

We consider research on plants among the much larger programs in DOE as akin to the mammals during the age of the dinosaurs. We are there, behind the scenes, hopefully creatively and innovatively working on novel ways to succeed in the future. So I think a small investment in this research area can reap great dividends for eventual progress in energy and environmental sciences.

I want to talk a little about a couple of research areas that are involved within the Division of Energy Biosciences. In essence, we study how organisms use the sun's energy, either directly or indirectly, to make or to destroy important compounds. It is kind of a make-it or break-it approach. These organisms use the sun's energy to produce other forms of chemical energy, some of which can teach us how to make other energy sources in the future, and others can be used directly to biosynethesize potential fuels, such as hydrogen.

There are other products that can be made that are petroleum replacing compounds. There is a compound called PHB, a biological compound which is very much like polystyrene. So we can use the sun's energy to produce these times of things. Also, special products, such as lauric acid, can be produced easily, cheaply, and in large amounts.

Examples of things in which we use it to break things down are like metabolization and detoxification of toxic substances, cellulose degradation, or fossil fuel desulfurization. All products that are important, and to ensure that we can use current energy sources in a cleaner and more helpful fashion.

Some of the things that we can do now are dependent upon our ability to manipulate plants and other photosynthetic microorganisms. We can now introduce into plants the ability to produce important substances such as lubricants and plastics that may replace petroleum-based products.

Can you imagine farmers redirecting their excess crop capacity to grow corn plants; or they can accumulate vast amounts of biodegradable plastics or vaccines? And imagine also bacteria that can convert plant waste, such as corn cobs, wheat straw, or grass clippings into ethanol, which can be used to fuel our cars and as chemical raw materials for the manufacturing of other important chemicals. Some very interesting possibilities.

I think a very important thing for DOE is the process known as phytoremediation of the soil and water of a large number of manufacturing and mining sites, including many for which DOE is responsible, are contaminated with heavy metals, radionuclides, and organic pollutants. The Division of Energy Biosciences has taken the lead in supporting basic research and on biotechnology to modify plants and microbes so that they can withdraw and detoxify pollutants, thereby avoiding the enormous expense that can occur in cleaning this up, as we have just heard.

Genetic selection and biotechnology are being used to create plants that concentrate large amounts of toxic metals and create the bacteria that remove sulfur pollutants from petroleum prior to combustion. So, overall, many, many possible programs can be funded through this area.

Mr. Chairman, we appreciate the strong support that you and the committee have given the Division of Energy Biosciences, and we emphasize the importance of basic research to the Nation's energy independence. I want to thank you for everything you did during this last year and hope that you will continue in fully funding this program.

Mr. MYERS. Thank you, Lou, for your testimony. Thank you.

[The statement of Mr. Sherman follows:]

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STATEMENT OF

THE AMERICAN SOCIETY OF PLANT PHYSIOLOGISTS

BEFORE THE

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
COMMITTEE ON APPROPRIATIONS
U.S. HOUSE OF REPRESENTATIVES

ON

FEBRUARY 29, 1996

RELATING TO THE

PROPOSED FISCAL YEAR 1997 APPROPRIATION FOR
RESEARCH AT THE DIVISION OF ENERGY BIOSCIENCES
DEPARTMENT OF ENERGY

PRESENTED BY

DR. LOUIS SHERMAN
PROFESSOR AND HEAD
DEPARTMENT OF BIOLOGICAL SCIENCES
PURDUE UNIVERSITY

Summary

The Department of Energy's Division of Energy Biosciences funds basic research in the plant sciences and non-medical microbiology in three major areas: the use of the sun's energy to manufacture chemicals; the use of plants and microbes to manufacture new products; and the use of plants and microbes to clean up toxic wastes. For example, the Division of Energy Biosciences has funded research to enable researchers to manipulate plants so that they produce biodegradable plastic as the product of an agricultural crop. The results of such research projects hold the promise of allowing many unique chemicals to be produced by plants and photosynthetic microbes very inexpensively, because these chemicals are produced as a result of capturing the energy from the sun. Another example of the fruit of this program is that plants have been developed to assist in cleaning up the environment by absorbing large concentrations of toxic chemicals. Phytoremediation -- using plants to clean up the environment -- has the potential of solving many of our country's large pollution clean-up problems cheaply and efficiently. The entire program of the Division of Energy Biosciences, in addition to the accomplishments reflected in these two examples, is especially critical to our nation's future, particularly when you consider how much important new knowledge in this area would have gone undiscovered without the support of this program. **We request that the Division of Energy Biosciences be supported in Fiscal Year 1997 at a level above the Fiscal Year 1996 amount that would make possible an increase over the current five-percent approval rate the program has for new ideas presented.** The Division of Energy Biosciences program is an example of the way basic science should be used to solve some of our country's most challenging problems.

Thank you, Mr. Chairman, my name is Louis Sherman and I am Professor and Head of Biology at Purdue University. I'm representing the American Society of Plant Physiologists (ASPP), a society composed of over 5,300 plant scientists from the U.S. and around the world, 57 of whom are at Purdue. I have been asked to provide these remarks because of my long interaction with this DOE program and my strong support for research funding for this important area of science.

I speak on behalf of the Division of Energy Biosciences, a small program in the Department of Energy's Office of Basic Energy Sciences. This program funds pioneering research in the plant sciences and what is referred to as non-medical microbiology. The division's budget for FY96 is $30.2 million, and we would like to request an increase to at least $35 M. This is a broad area of research with tremendous opportunities for breakthroughs that will offer Americans viable alternative fuels, new cost-effective ways of cleaning the environment and other new technologies. The wealth of opportunities available to be tapped by research in this area are exceptional. A full ninety-five percent of the new ideas submitted to the Division of Energy Biosciences are turned away each year because of relatively limited funds. Sadly, among those 19 out of every 20 submissions rejected, there are some brilliant opportunities lost. The requested increase would still only permit less than 10% of the proposals to be funded. I hope that you will fully fund this program this year and that you will establish a plan to promote and enhance the activities of this division in the future.

You may be wondering why DOE funds basic research in plant and microbial sciences. You should remember that, to the best of our knowledge, the fossil fuels such as oil and gas which represent the bulk of our current energy sources were originally biological material that ultimately used the sun for energy. We consider research on plants among the much larger programs in DOE as akin to the mammals during the age of the dinosaurs. We are there, behind the scenes, creatively and innovatively working out novel ways to succeed in the future. A small investment in this research area will reap great dividends for eventual progress in energy and environmental sciences.

I consider this program to be unique and a remarkably effective investment for the nation. Without this Committee's support for the Division of Energy Biosciences, the U.S. would be far behind much of the world in developing knowledge for new technologies in this broad and promising area of research. The program of the Division of Energy Biosciences tackles fundamental scientific problems that relate to how plants and certain microbes utilize specialized energy sources, such as the sun, to power the activities of these cells and to manufacture remarkable products. The Division of Energy Biosciences actively promotes the transfer of these new technologies to the practical solution of energy-related and environmental concerns.

Make it or break it. Many of the important programs funded by the Division of Energy Biosciences show how organisms use the sun's energy, either directly or indirectly, to make or destroy important compounds. For example, these projects study how plants and other photosynthetic organisms use the sun's energy for:

- Production of chemical energy
- Biosynthesis of potential fuels
- Biosynthesis of petroleum-replacing compounds; e.g., PHB (like polystyrene)
- Production of high levels of lauric acid in specially-constructed strains of plants
- Production of hydrogen

Other studies are involved with using biological systems to breakdown otherwise harmful compounds. Examples include studies to understand

- Metabolization and detoxification of toxic substances
- Cellulose degradation
- Fossil fuel desulfurization

These biological processes will prove to be extremely valuable in developing new energy sources or in insuring that we can use current energy sources in a cleaner and more healthful fashion.

The research programs can be placed into three basic categories:

Using the sun's energy to manufacture chemicals. Plants and certain microbes are the earth's only source of renewable biomass. By this I mean that the organisms have the ability, through the mechanism of photosynthesis, to convert the energy in sunlight into the chemical feedstocks that mankind and all other living creatures require for life. Research supported by the Division of Energy Biosciences on the fundamental mechanisms of photosynthesis is making it possible to better understand plant metabolism and plant growth and development. With this knowledge, we are now able to improve the yields and efficiency of agriculture and forestry and to develop efficient and economical devices (such as photoelectric cells) for capturing solar energy.

Using plants and microbes to manufacture new products. This program was established to help us understand the products of energy bioconversion. Biological systems perform myriads of chemical transformations that result in products with unique characteristics. Understanding these natural processes of plants and microbes will allow scientists to exploit their benefits. Some chemicals produced naturally by these organisms may prove to be highly beneficial to mankind and include compounds such as anti-cancer agents, cell growth enhancers and molecules that regulate man's biological clocks.

We can now introduce into plants and microbes the ability to produce (biologically) such valuable substances as lubricants and plastics that may replace petroleum-based products. Imagine farmers redirecting their excess crop capacity to grow corn plants that can accumulate vast amounts of valuable biodegradable plastics or vaccines and imagine also bacteria that convert plant wastes, such as corn cobs, wheat straw or grass clippings into ethanol, which can be used to fuel our cars and as chemical raw materials for the manufacturing of other important chemicals. Both of these possibilities are becoming a reality because of long-term basic science projects funded by the Division of Energy Biosciences, and now commercialized by small companies.

Using plants and microbes to clean-up toxic wastes-phytoremediation. The soil and water of a large number of manufacturing and mining sites, including many for which the DOE is responsible, are contaminated with heavy metals, radionuclides, and/or organic pollutants. The Division of Energy Biosciences has taken the lead in supporting basic research and biotechnology to modify plants and microbes so that they withdraw and detoxify pollutants, thereby avoiding the enormous expense that our country expends in an attempt to physically remove the pollutants from the soil and water. Genetic selection and biotechnology are being used to create plants that concentrate large amounts of toxic metals and create the bacteria that remove sulfur pollutants from petroleum prior to combustion.

Mr. Chairman, we appreciate the strong support this committee has given the Division of Energy Biosciences and we hope that you will continue to emphasize the importance of basic research in the life sciences to the nation's future energy independence.

THURSDAY, FEBRUARY 29, 1996.

LIFE SCIENCE RESEARCH PROGRAMS

WITNESS

RALPH BRADSHAW, PRESIDENT, FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY

Mr. MYERS. Next is Ralph Bradshaw, President of the Federation of American Societies for Experimental Biology.

Mr. Bradshaw, welcome back, and your prepared statement will be placed in the record and you may proceed for 5 minutes as you like.

Mr. BRADSHAW. Thank you, Mr. Chairman and members of the subcommittee. I am from the University of California at Irvine, and I want to point out that we are, although not a traditional powerhouse, leading the bid west this year and looking for our first NCAA bid.

I am here today to represent the Federation of the American Societies of Experimental Biology, often known better by its acronym FASEB, which is an organization of 10 scientific societies with over 44,000 members. We are the oldest and largest organization of working bioscientists in this country.

Now, the DOE supports research projects that rely on the unique multidisciplinary facilities of the national labs in collaboration with universities and research institutes. The biomedical research, although only a relatively small part of the DOE activities, demonstrates the effective use of the agency's resources for fundamental research in the fields of emerging importance. My testimony today will focus on the biomedical activities of DOE, which come under the agency's Biological and Environmental Research division.

Funding for this is administered by the Office of Health and Environmental Research, and I would like to begin with our recommendations for funding for this portion of the agency. We recommend that OHER, in fiscal 1997, receive an increase of approximately 6 percent in its budget, bringing it to a level of about $184 million, over the 1996 funding level of $173.5 million. The full details of this recommendation are in our report, Mr. Chairman, which you have been provided with.

A few words about the biomedical research programs of the DOE and some of their accomplishments.

The major program is certainly the Human Genome Program, which is conducted in collaboration with the NIH. It develops instrumentation and provides resources for discovering, mapping, and sequencing human genes. I think we are all aware this is a major scientific effort which promises to pay great dividends in human health in the next century. The DOE's computational abilities have been particularly useful in handling the large amounts of data that have been generated by this project.

Also important to the DOE program is the Structural Biology Program, which supports the beam lines and facilities at its advanced energy sources and allows a structural determination of biological molecules and matter that really cannot be determined in any other fashion. These facilities are unique and used each year by hundreds of academic and industrial researchers throughout this Nation.

Two other divisions, the Medical Applications Research division, develops powerful tools for diagnosis in disease; and the Health Effects Research division, which is the agency's original biomedical research mandate, examines the effect of energy use and development on human health.

Let me note a few examples of successes in the past year. DOE-sponsored research has been responsible for the development of monochromosomal libraries of human chromosomes with large DNA inserts that have continued to be a major resource for DNA mapping, sequencing, and gene discovery. I point out the BRCA1 breast cancer gene came from these libraries.

They have been involved in the identification of the gene for AT, the acronym is a lot easier than the disease, Ataxia-telangiectasia, which is a rare, inherited disease characterized by extreme sensitivity to ionizing radiation. These genes are clearly related to cancer as well, as noted previously.

Finally, they have determined the structure of the signaling portion of the insulin receptors, the biological switch which controls the hormone insulin, and this information will be of great use in studying diabetes and related diseases. For all these discoveries and advances, we can expect new and useful therapies in our fight against cancer and other debilitating human diseases.

The 104th Congress has proposed initiatives to realign DOE objectives, including transferring selected DOE programs and facilities into a Department of Science. Any recognition of the DOE should recognize that the national laboratories are the most important scientific asset of the agency and one of the most valuable assets of the Federal Government.

There have been four bills introduced into the House that deal with these laboratories. In one of these, the DOE Laboratory Missions Act, the act assigns the Secretary of Energy responsibility for streamlining the operations of the laboratories to accomplish specified missions, while leaving latitude for input by the scientific community and other citizens. FASEB strongly supports the passage of this or a similar measure.

We also continue to affirm that the process of streamlining DOE operations and paring of expenditures would be greatly assisted by reviewing the regulations governing the handling of waste. This is probably a continuing theme for this committee. We believe that many of these regulations are overly broad, inappropriate, and expensive.

Let me close by saying, Mr. Chairman, that we would like to emphasize a number of the DOE programs, notably the genome and structural biology programs, are emerging importance to U.S. science and technology, and they hold great promise for improving health in this country and we plead for your support in continuing these important activities. Thank you.

Mr. MYERS. Thank you, Dr. Bradshaw. This committee has been very much aware of the tremendous work being done by your universities and we will help you all we can. Thank you for your testimony.

Mr. BRADSHAW. Thank you.

[The statement of Mr. Bradshaw follows:]

FASEB FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY

The American Physiological Society
American Society for Biochemistry and Molecular Biology
American Society for Pharmacology and Experimental Therapeutics
American Society for Investigative Pathology
American Institute of Nutrition
The American Association of Immunologists
The American Society for Cell Biology
Biophysical Society
American Association of Anatomists
The Protein Society

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FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY
(FASEB)

TESTIMONY BY:

RALPH A. BRADSHAW, PhD
President of FASEB

Before

House Appropriations Subcommittee on Energy and Water Development

February 29, 1996
10:30 A.M.

9650 Rockville Pike • Bethesda, Maryland 20814-3998
Telephone 301-530-7075 • FAX 301-530-7190

Mr. Chairman and Subcommittee members:

I am Dr. Ralph A. Bradshaw, professor of Biological Chemistry at the University of California, Irvine. I appear before you today as President of the Federation of American Societies for Experimental Biology (FASEB), an organization of 10 scientific societies with 44,000 members. FASEB is the oldest and largest organization of working bioscientists in the nation.

The Department of Energy (DOE) supports research projects that rely on the unique multidisciplinary capabilities and facilities of the National Laboratories, and also supports collaborative researchers at universities and other institutes. Biomedical research, although a relatively small fraction of DOE activity, demonstrates the effective use of the agency's resources for fundamental research in fields of emerging importance. My testimony focuses on the biomedical activities of DOE within the agency's Biological and Environmental Research (BER) division.

BER analyzes health and environmental consequences of energy use and development, and applies the department's facilities to solve major scientific problems in the environment, medicine, and biology. Funding appropriated under the BER category is administered by DOE's Office of Health and Environmental Research (OHER), and about half of the office's operational budget is administered in four biomedical research programs: Human Genome, Structural Biology, Medical Applications, and Health Effects Research.

The operating expenditure for OHER's biomedical research programs in FY 1995 was approximately $184 million, supporting nearly 380 research projects. About 65% of this $184 million was used to fund experimentation at the National Laboratories and 35% supported university-based research projects. There were 120 such university-based research projects in FY 1995. Only one new request for grants was issued in FY 1995, under the Ethical, Legal, and Social Issues portion of the Human Genome Program. Twenty-six of 68 applications received in response to this solicitation were funded.

> **FASEB's recommendation for OHER in fiscal 1997 is almost $184 million, a six percent increase over the FY 96 funding level of $173.5 million. The full details of our recommendations may be found in the FASEB Funding Consensus Conference report which I have supplied to the Subcommittee.**

The DOE Human Genome Program, conducted by OHER in collaboration with the NIH, develops instrumentation and provides resources for discovering, mapping, and sequencing human genes. The unique capabilities of DOE and NIH continue to complement each other. DOE is building on its computational strengths to develop new computer and informatics tools to manage the voluminous genome data from humans and other important organisms for agriculture, industry, and medicine. The DOE Structural Biology Program supports beamlines and facilities at its advanced energy sources for determining the structure of biological molecules and matter. These facilities are unique national core research facilities used each year by hundreds of academic and industrial researchers throughout the nation to identify the structure of components of cells and viruses.

Medical Applications Research includes development of powerful tools such as radiotracers, positron emission tomography, and single photon emission computed tomography. It also includes advanced image processing and informatics for non-invasive diagnosis as well as tools for molecular therapies including genetically engineered monoclonal antibodies and boron carrier compounds. Health Effects Research, the agency's original biomedical research mandate, examines the effects of energy use and development on human health. Through these programs, DOE collaborates with university-based researchers and uses the resources of the National Laboratories to make basic discoveries that foster broad national interests in areas such as human health and economic competitiveness. Notable recent accomplishments of DOE-sponsored research include:

* The development of monochromosomal libraries with large DNA inserts of all human chromosomes using unique DOE-developed resources for sorting individual chromosomes. These have been made widely available and continue to be the major resource for DNA mapping, sequencing, and gene discovery. Interestingly, they were the source the DNA used to isolate the BRCA1 breast cancer gene.

* The successful engineering of Taq polymerase, a thermostable DNA polymerase, so that it ignores DNA sequences called terminators. This achievement, one of the most economically significant protein engineering accomplishments to date, is already resulting in a considerable and significant reduction in the cost of reagents needed for DNA sequencing.

* The identification of the gene for AT (Ataxia-telangiectasia), a rare, inherited disease characterized by extreme sensitivity to ionizing radiation, by researchers at UCLA working with an international consortium. There is evidence that women who carry one copy of a defective AT gene have five fold higher rates of breast cancer. The investigators are now exploring the possibility that the selective disabling of the AT gene in cancer cells might make them more sensitive to therapeutic radiation.

* The determination of the three-dimensional structure of the signalling portion of the human insulin receptor using the National Synchrotron Light Source at Brookhaven National Laboratory by scientists from Columbia University and Texas A&M . This is one of a large family of biological switches that control cell growth and development, and this new information has marked significance for the treatment of diabetes and cancer as well as other disorders of human development and metabolism.

Other promising research in progress includes a university-industry collaboration that is developing a novel microchip, coated with thousands of pieces of DNA, to improve the utility of DNA analysis chips. They are useful in DNA diagnostics. The technology has the potential for widespread applications in the purification of DNA products and for managing other classes of charged macromolecules including proteins, polysaccharides, and lipids.

The 104th Congress has proposed initiatives to realign DOE objectives and has considered eliminating the Department, curtailing support in areas of environmental and commercial R&D, and transferring selected DOE programs and facilities into a newly created Department of Science. Any reorganization of the DOE should recognize that the National Laboratories are the most important scientific asset of the agency and one of the most valuable assets of the federal government. Four bills have been introduced in the House of Representatives that would reorganize the nation's laboratories. One of these bills, the DOE Laboratory Missions Act, includes the following as one of five missions for the National Laboratories: *To conduct basic research in energy-related science and technology, in the fundamental understanding of matter, and in emerging scientific fields, including construction and operation of unique scientific instruments and facilities for use by the federal Government, academia, industry, and other appropriate non-federal institutions.* The Act assigns the Secretary of Energy responsibility for streamlining the operations of the laboratories to accomplish specified missions, and leaves latitude for input by the scientific community and other citizens. FASEB supports the passage of this act or similar measures that would preserve the scientific instruments and facilities of the National Laboratories and their availability to the broader research community.

Last year, FASEB concluded that the process of streamlining DOE operations and paring expenditures would be greatly assisted by reviewing regulations governing the handling of hazardous wastes. The role of regulations in protecting workers and local areas is paramount, but many regulations affecting research are overly broad, inappropriate, and expensive. FASEB reaffirms that regulations must be revised so that they are appropriate to the size and mission of individual facilities.

FASEB believes that the quality of the biomedical research of DOE is enhanced by the competitive, merit review of research projects. DOE has redirected considerable amounts of funding toward particularly promising research areas. To do this in the current climate of budgetary stringency required great strength of purpose and involved many difficult decisions. FASEB applauds these efforts and encourages DOE to reallocate its resources to areas of greatest scientific impact. FASEB cautions that these laudable efforts could be undermined seriously if past practices of earmarking substantial fractions of DOE health-related research funds continue.

A number of DOE programs, notably the genome and structural biology programs, are emerging as critical components of the U.S. science and technology infrastructure. The full benefit of these programs is yet to be realized. The FY 1996 allocation for biomedical research programs within DOE's Office of Health and Environmental Research was almost $174 million. Funding for these programs needs to be increased to a total of almost $184 million, a 6% increase, so that they can achieve their extraordinary promise.

Mr. Chairman, that completes my testimony. I will be pleased to answer any questions.

THURSDAY, FEBRUARY 29, 1996.

CLEANUP OF URANIUM MILL TAILINGS PILES

WITNESS

PAT MORGAN, GENERAL COUNSEL, UMETCO MINERALS CORPORATION

Mr. MYERS. Pat Morgan, Umetco Minerals Corporation. Your prepared statement will be placed in the record and you may proceed for your 5 minutes as you like.

Mr. MORGAN. My name is Pat Morgan, and I am the General Counsel for Umetco Minerals Corporation. I am appearing in place of Curtis Sealy, whose testimony I am submitting for the record. He could not be with us today. He is the General Manager of Umetco.

This is the fourth appearance of Umetco before this committee in support of the decommissioning and decontamination fund which was established under Title XI of the National Energy Policy Act of 1992. Congress appropriated $40.6 million in fiscal 1994, $41.7 million in fiscal 1995, and $42 million last year to reimburse uranium and thorium site licensees for that portion of the cost of reclaiming tailings related to government purchases of uranium and thorium during and following the Manhattan Project.

There are 13 uranium sites and there is 1 thorium site located in east Chicago, Illinois, that are authorized to receive reimbursement under Title X of the National Energy Policy Act. Umetco owns 2 of these 13 sites which are being reclaimed. One is located at Uravan, Colorado; the other is located at Gas Hills, Wyoming. Fifty-five percent of the tailings at Uravan, and approximately 20 percent of the tailings at Gas Hills are related to government purchases for the Manhattan Project AEC.

To date, Umetco has spent over $90 million to clean these two sites, and before we have finished we expect to spend over $130 million. We appreciate the support of this subcommittee in the past and through fiscal years on this program, and we request continued funding of the Title X reimbursement program, which is part of the D&D fund.

In closing, I would like to wish you, Chairman Myers, and former Chairman Bevill very well on your post congressional activities. Thank you very much.

[The statement of Mr. Sealy follows:]

Statement
of
Curtis O Sealy
General Manager
Umetco Minerals corporation
Concerning
FY '96 Appropriations for Energy & Water Development
Before the
Subcommittee on Energy & Water Development
Committee on Appropriations
U.S. House of Representatives
February 29, 1996

Mr. Chairman and distinguished Members of the Appropriations Committee's Subcommittee on Energy & Water Development, my name is Curt Sealy. I am General Manager of Umetco Minerals Corporation. I am here today to present testimony in support of continued appropriation for the Decommissioning and Decontamination ("D&D") fund established under Title XI of the National Energy Policy Act of 1992. (P.L. 102-486). The D&D fund was established by Congress for the clean-up of the Federal government's three civilian uranium enrichment plants which are located at Oak Ridge, Tennessee, Paducah, Kentucky and Portsmouth, Ohio, and to reimburse uranium mill tailings site licensees for the costs of reclamation relating to the Manhattan Project (1942-45) and national security purchases of uranium from 1947 to 1970.

This year marks the 51st anniversary of our nation's entry into the Atomic age which brought World Word II to an end. Umetco played an important role in the Manhattan Engineering District project and later supplied some 50 million pounds to the old Atomic Energy Commission ("AEC") for national security. The uranium was produced under contracts which contained no provision for mill tailings reclamation because there were no environmental clean-up laws at that time. It was not until 1978 that the Uranium Mill Tailings Radiation Control Act became law. So, in a sense, we and others, got stuck with the clean-up tab notwithstanding the fact that the entire nation benefited from our activities.

In a report titled, "Cleaning Up Uranium Mill Tailings: Is Federal Assistance Necessary?" Congress' own General Accounting Office ("GAO") concluded that: "In order to assure that the uranium mill tailings are controlled in a safe and environmentally sound manner, we recommend that the Congress provide assistance to the active mill owners to share in the cost of cleaning up the portion of the mill tailings that were generated under Federal contracts. These are the tailings for which the Federal Government has a strong moral responsibility." (Emphasis supplied.)

For FY '96, this subcommittee appropriated $278,807,000 for the D&D Fund of which $42,000,000 was allocated for reimbursement of companies, like Umetco, for the mill tailings clean-up. For FY '95, this subcommittee and Congress appropriated $41,700,000 and $40,600,000 was appropriated for FY '94.

In Title XI of the National Energy Policy Act, Congress authorized an appropriation of $480,000,000 annually, indexed to inflation, for 15 years to go into the D&D fund. Money would come from an annual $330,000,000 appropriation from the U.S. Treasury and $150,000,000 per year "Special Assessment" on nuclear utilities based on past utilization of the civilian enrichment facilities. I would like to point out that the staff of the House Energy & Power subcommittee estimated during enactment of the uranium provisions of the National Energy Policy Act that the new government-owned uranium enrichment corporation would contribute in excess of $330,000,000 per year to the U.S. Treasury. This more than off-sets the government's contribution to the D&D fund.

In Title X of the National Energy Policy Act, Congress authorized an appropriation of $310,000,000 to reimburse site licensees for that portion of the clean-up of 13 uranium mill tailing sites located in the state of Colorado, Wyoming, Utah, New Mexico, Washington and South Dakota and one thorium site in Illinois related to the sale of uranium of the AEC. Title X was unanimously adopted by the House and Senate committees involved in the energy legislation. Funding for the mill tailings clean-up has been supported by both the Bush and Clinton administrations. The mill tailings clean-up has been supported by uranium mining companies, organized labor, environmental groups and the National Taxpayers Union. It has also been supported by the GAO, the Western and National Governors' Associations and the Michigan legislature.

To date, Umetco has spent in excess of $90,000,000 at our Uravan, Colorado, and Gas Hills, Wyoming, reclamation sites. When we are finished, the total costs will exceed $130,000,000. Over 55%, or 5.7 million tons, of the 10.2 million tons of mill tailings at Uravan, Colorado, relate to the Manhattan Project and national security purchases. The Gas Hills, Wyoming, site has 11.2 million tons of tailings of which 2.1 million tons, or nearly 20%, relate to the Manhattan Project and national security purchases.

Mr. Chairman, Umetco Minerals Corporation was a pioneer in the uranium/vanadium mining industry in the United States. We began mining uranium/vanadium bearing ores on the Colorado Plateau in 1929. We discarded the uranium component of the ores into the mill tailings piles because it had no significant value until the Manhattan Project was undertaken. Vanadium, by the way, is used as a hardening agent in steel related products.

In 1942, when the Manhattan Engineering District contracted with us for uranium production from our Uravan facility, we reprocessed the uranium-bearing mill tailings from previous production of vanadium, which combined with continuing mine production, supplied uranium to the U.S. Government. After World War II, we continued to produce uranium for the AEC weapons program.

We began clean-up at Uravan in 1980 and Gas Hills in 1982. This was shortly after UMTRCA became law which imposed very costly clean-up standards on the uranium industry. As mentioned, when we are finished the total clean-up cost will exceed $130,000,000.

In summary, this subcommittee has supported an appropriation of reimbursement clean-up in FY '96. The uranium provisions (IX, X and XI) in the National Energy Policy Act provided a revenue stream for the D&D fund and the legislation was supported by a broad-based coalition consisting of the mining companies, organized labor, environmental groups and the National Taxpayers Union. We hope the subcommittee will support the continued appropriations for the D&D fund of which a portion would go for continuing uranium mill tailings clean-up reimbursement.

Thank you.

Mr. MYERS. Well, thank you, very much for remembering that. I guess next year these young people here coming in, you can tell them what a responsibility they have. Will you?

Thank you for the job you are doing. It is a growing problem in our country, as we all know, handling the waste, we have not done too good a job in too many places.

Mr. MORGAN. We are trying to do it as efficiently as we can.

Mr. MYERS. Keep us posted as to the progress. Thank you very much for the testimony.

THURSDAY, FEBRUARY 29, 1996.

PROGRAMS AFFECTING THE NAVAJO NATION

WITNESS

ELMER MILFORD, NAVAJO NATION

Mr. MYERS. Albert Hale, President of the Navajo Nation. Your complete statement will be placed in the record, and you may proceed for 5 minutes as you would like.

Mr. MILFORD. Thank you very much.

Mr. Hale is the President of the Navajo Nation, but, Mr. Chairman, members of the subcommittee, I am Elmer Milford, Chairman of the Navajo Nation council's resources committee which has oversight responsibility over all Navajo Nation natural resource development projects. On behalf of the Navajo Nation, America's largest Indian Nation, and President Hale, thank you for this opportunity to present the Navajo Nation's fiscal year 1997 funding request.

I also want to thank Chairman Myers and Ranking Member Bevill, as well as the distinguished subcommittee members, for their attention to the Navajo Nation's needs in the past years, including providing $6.1 million for the Navajo Transmission Project in fiscal year 1996. We look forward to continuing our productive relationship with the subcommittee on funding efforts for energy and water development programs.

The Navajo Nation encompasses 17.5 million acres, spanning the States of Arizona, New Mexico, and Utah. The Navajo Nation has an annual precipitation ranging from less than 6 inches in the San Juan River Valley, to more than 20 inches in the isolated mountain peaks.

The Navajo Nation is also endowed with significant renewable and nonrenewable natural resources, including surface and groundwater, irrigated farmlands, forests and lakes, fish and wildlife, and substantial reserves of coal, oil, and natural gas.

Despite the natural endowments and our significant economic potential, conditions on the Navajo Nation are comparable to those found in underdeveloped Third World countries. For example, the Navajo Nation per capita income averages $4,106; and over 56 percent of its people live below the poverty level. Basic necessities of life, taken for granted elsewhere in America, are sorely lacking in the Navajo Nation: 77 percent of the Navajo homes lack plumbing; 72 percent lack adequate kitchen facilities; and 76 percent lack telephone service.

The Navajo Nation, like most Indian Nations, face numerous unmet conservation needs, including significant water conservation, development, storage and delivery, irrigation, and other facilities that provide for the long-term prosperity and well-being of the Navajo people. The conservation needs are essential in the arid Southwest because of scarce water resources. Proper conservation and planning will ensure the future water needs for the rural development and domestic use will be met on the Navajo Nation.

Because of these tremendous infrastructure deficiencies, the Navajo Nation requests that the subcommittee direct the Bureau of Reclamation to support the Navajo Nation with the same level of attention, expertise, and assistance which has long benefitted our region and made possible the prosperity of the West.

As you know, the Federal trust responsibility is not in the province of a single agency but, instead, is shared by the Federal agencies. In the past, the Bureau of Reclamation has provided much needed technical assistance to the Navajo Nation's Safety of Dams Program, planning assistance for the Navajo-Gallup pipeline, as well as initiating rehabilitation of Navajo irrigation projects along the San Juan River, New Mexico. However, the Navajo Nation is concerned that many Indian Nations have still not fully benefitted from the Bureau's reclamation program.

In the area of magnitude of the Navajo Nation's need, this progress can be viewed as the halting first steps of a bureau with the knowledge, expertise, and mission of promoting reclamation.

Water is life on all Indian reservations. The Navajo Nation seeks continued assistance from the Bureau of Reclamation and the Department of Interior to actively manage the future development of our water resources, and we ask that you confirm the Bureau's trust responsibility by redirecting the Bureau of Land Management to target and prioritize Indian water needs and to provide Indian Nations with equality in the number of water structures and facilities.

It is our hope that the members of the subcommittee understand the importance of water, resource development, and protection to not only the Navajo people but in the Southwest.

Again, thank you very much for this opportunity.

Mr. MYERS. Well, thank you very much on behalf of the Navajos. Thank you.

Mr. MILFORD. Thank you.

[The statement of Mr. Milford follows:]

Subcommittee on Energy and Water Development
United States House of Representatives Committee on Appropriations

TESTIMONY OF ELMER MILFORD
THE NAVAJO NATION

Hearing of Fiscal Year 1997 Appropriations
February 29, 1996

Mr. Chairman and Members of the Subcommittee, I am Elmer Milford, Chairman of the Navajo Nation Council's Resources Committee. On behalf of the Navajo Nation, America's largest Indian nation, and President Albert Hale, I appreciate this opportunity to present the Navajo Nation's Fiscal Year 1997 funding request to the Subcommittee.

At the outset, I want to thank Chairman Myers and Ranking Minority Member Bevill, as well as the other Subcommittee Members for their attention to the Navajo Nation's needs in the past years, including providing $6.1 million for the Navajo Transmission Project in FY 1996. We look forward to continuing our productive relationship with the Subcommittee on funding efforts for Indian energy and water development programs.

THE NAVAJO NATION

The Navajo Nation encompasses 17.5 million acres, spanning the states of Arizona, New Mexico, and Utah. The Navajo Nation lies on the arid and semi-arid uplands of the Colorado Plateau, with an average elevation of 6,000 feet above sea level, and an average annual precipitation ranging from less than 6 inches in the Painted Desert and San Juan River Valley, to more than 20 inches on isolated mountain peaks.

The Navajo Nation is also endowed with significant renewable and non-renewable natural resources, including surface and groundwater, rangelands and woodlands, irrigated farmlands, forests and lakes, fish and wildlife, and substantial reserves of coal, oil, and natural gas.

Despite these natural endowments and our significant economic potential, socio-economic conditions on the Navajo Nation are comparable to those found in underdeveloped third world countries. The Navajo Nation is characterized by unemployment levels ranging seasonally from 31% to 50%; per capita income averaging $4,106; and over 56% of its people live below the poverty level. Basic "necessities" of life, taken for granted elsewhere in America are sorely lacking in the Navajo Nation: 77% of Navajo homes lack plumbing, 72% lack adequate kitchen facilities, and 76% lack telephone service.

Our rural development deficit contributes to a seemingly never-ending downward spiral. We are constantly seeking to attract jobs and businesses to our reservations to spur economic growth and address our massive infrastructure deficiencies, but those infrastructure deficiencies (and the resulting higher non-wage costs facing businesses locating on reservations) continually undercut and frustrate our efforts. The Navajo Nation's primary source of revenue is derived from its natural resources. Accordingly, the Navajo Nation has made substantial investments of its limited financial resources into the management and development of Navajo natural resources, including water resources development and maintenance.

However, the Navajo Nation's own revenues from taxes and royalties are decreasing; we estimate by as much as 10% in the coming year. Depletion of the oil and gas resources and the expected negative impact on coal sales by the recent deregulation of the American energy market has jeopardized the flow of the Navajo Nation's revenue stream. And unlike a very small percentage of Indian nations, the Navajo Nation has not legalized nor benefitted from Indian gaming.

Therefore, the Navajo Nation requests that the Subcommittee direct the Bureau of Reclamation to support the Navajo Nation with the same level of attention, expertise and assistance which have long benefitted other regions and made possible the prosperity of the west. The federal trust responsibility is not in the province of a single agency, but instead is shared by all federal agencies.

Some of the projects needed in the Navajo Nation are obvious and have been defined for some time. For example, there are at least 12 major unsafe dams in Arizona and New Mexico. These twelve dams total 71,130 acre-feet for surface water storage, approximately 90% of the total Navajo Nation storage capacity. Eight of these dams are currently listed as "high" or "significant" hazards on the Department of Interior's technical priority list of deficient dams. Correction of deficiencies to these dams may require as much as $100 million.

Another project for which planning was first authorized in 1971, is the Navajo-Gallup Pipeline. This pipeline would serve the eastern part of the Navajo Nation, Window Rock, AZ and the city of Gallup, NM -- a widespread area where groundwater is not available in quality or quantity. Planning assistance for the Pipeline is critical at this time to answer questions raised by constraints on water availability dictated by the Endangered Species Act in the San Juan River Basin. Additionally, the Navajo Nation requires research and planning to determine solutions to the other water needs of the Navajo Nation.

FISCAL YEAR 1997 FUNDING NEED

The Navajo Nation is seeking continued assistance from the Bureau of Reclamation and the Department of Interior to actively manage the future development of its water resources and these requests reflect necessary funding for the following high priority programs.

1. Indian Dam Safety Technical Assistance ($680,000)

    In 1994, Congress enacted the Indian Dam Safety Act (P.L. 103-302), providing for the maintenance of dams on Indian lands. This Act (Section 4(g)) authorizes the Secretary of the Interior to "obtain technical assistance on a non-reimbursable basis from other department and agencies." The Navajo Nation strongly recommends that the Subcommittee provide funding to the Bureau of Reclamation for this program, since annual appropriations funded under the Bureau of Indian Affairs do not come close to meeting the needs of the Navajo Nation.

The Navajo Nation Safety of Dams program was created to coordinate with the BOR and the BIA all activities related to the completion of structural improvements to hazardous dams. This program will continue the necessary actions and improvements to address the safety deficiencies identified through the safety evaluations of existing dams project.

2. Drought Contingency and Water Management Plan ($500,000)

In 1997, the Navajo Nation and Bureau of Reclamation will begin Phase 3 of an ongoing project (started in 1995) to develop detailed plans and recommendations for a drought response and rural water supply plan, and develop a database and data base management system for groundwater monitoring within the Navajo government. Phase 1 identified issues that water management planning efforts needed to address. Phase 2 will develop public consensus for the proposed planning effort.

3. Technical Studies in the San Juan and Little Colorado River Basins ($400,000)

Funding is requested from this account to evaluate water development projects on the Navajo Nation. For example, the development of available water in the San Juan River Basin is being severely constrained by the Endangered Species Act. This Act has caused major problems for both Navajo and non-Indian water development projects in the San Juan Basin, including the Navajo Indian Irrigation Project and the proposed Navajo-Gallup Pipeline. Because the Act complicates all San Juan Basin water development and water rights discussions, there is great need for increased funding for technical studies in the Basin.

4. Planning Activities for the Navajo-Gallup Pipeline Project ($400,000)

Existing groundwater supplies in northwest New Mexico and northeastern Arizona are inadequate to meet expected future demands. This funding for preliminary studies for the San Juan River Gallup-Navajo Pipeline Supply Project will assist in the planning of a water pipeline to serve communities in the eastern portion of the Navajo Nation and the City of Gallup, NM. Obstacles created by the Endangered Species Act seriously jeopardizes the completion of this project.

CONCLUSION

On all Indian reservations water is life. It is my hope that the Members of this Subcommittee understand the importance of water resource development and protection to not only the Navajo people, but also, the entire Southwest. The Navajo Nation appreciates the support of the Subcommittee. Detailed justification sheets on these programs will be provided to the Subcommittee staff shortly.

THURSDAY, FEBRUARY 29, 1996.

FUSION PROGRAM

WITNESS

DAVID E. BALDWIN, SENIOR VICE PRESIDENT, FUSION GROUP, GENERAL ATOMICS, SAN DIEGO, CALIFORNIA

Mr. MYERS. Next is David Baldwin, Senior Vice President of General Atomics. Your prepared statement will be placed in the record, and you may proceed for 5 minutes as you like.

Mr. BALDWIN. Thank you very much, Mr. Chairman, and members of the subcommittee. I am here to talk to you about the fusion energy research program.

It has been a very turbulent and productive 3 or 4 months in this program since the arc of the Congress last fall instructing the Department to restructure the program to one consistent with a level of effort of out year funding. The Department has moved swiftly and responsibly to do this through its huge Energy Advisory Committee. The new plan for restructure which has come forward uses a strategy to, within the domestic program, to focus that program on developing the knowledge base for fusion science and then to do demonstrations through the international process.

This is a very responsible and productive plan, one I certainly endorse. It will put off any demonstration of fusion power, but that is to be expected. It makes for the domestic program a knowledge base rather than a demonstration, so we have to rethink the nature of our program and the use of our facilities.

To say that we will now be developing the science for the knowledge base is to shift slightly the focus of the program. In the past, we have told you that we are both a science and an energy program. We have known from the beginning that it was going to be necessary to develop the science of plasma physics in order to capture the power of fusion. We have carried out that scientific research for the purposes of demonstration.

Our strategy now is slightly different. Undeliverable will be the knowledge base itself, but we will be continuing in many respects the same kind of day-to-day scientific investigations that we have done. What is going to be difficult is to characterize and to highlight progress, because progress in science is very hard to typify. You don't have bell ringers or breakthroughs in the sense of major events. It comes in more multiple, smaller steps.

For your information, to my written testimony I have appended a chart by which I attempt to illustrate progress between the 1970s and the 1990s. We were designing machines in the 1970s, and, basically, we had a lot of questions. We had some rudimentary science, we had some ideas, but we were rudimentary in our knowledge.

At the present time we are able to do predictive calculations using computers and based on our scientific knowledge in many areas. Not all areas. We hope by the turn of the century to have more nearly completed that list. Our ultimate aim is to be predictive in all areas, and that is what we mean by using the science for the purpose of fusion.

So as I now look at the FEAC report, it recognizes quite candidly that the action of the Congress last fall was to abrogate to our international partners the leadership in the development of fusion energy. By that, they mean the big projects. What we have not abrogated, and what we do not want to abrogate, is leadership in the science.

The plan which they put forward was a plan designed to assure the U.S. leadership in science and our strong continued contribution to that. I strongly urge this committee to support the DOE plan when it comes forward in the DOE request next month and to help us secure that role.

Thank you very much.

Mr. MYERS. Well, thank you.

[The statement of Mr. Baldwin follows:]

Testimony to the
Energy and Water Development Subcommittee
House Appropriations Committee
by
David E. Baldwin
Senior Vice President, Fusion Group
General Atomics, San Diego, CA
February 29, 1996

I am pleased to appear before you today on the subject of fusion and plasma science research. I represent the General Atomics Company, which has a proud thirty-six year history in this area. GA is today one of the two largest DOE fusion sites in the nation and hosts the DIII-D tokamak where fusion research is carried out as part of a multi-institutional national and international program. Despite the DIII-D's relatively modest size and low magnetic field, it has led the world in demonstrating new advanced-tokamak modes of operation, it has elucidated important features of the underlying physics, and it has achieved absolute performance parameters among the best of the large tokamaks.

Fusion research has been conducted for forty years by all of the advanced nations of the world for its potential as an environmentally benign energy source suitable for the long term. This research has been motivated by the recognition that mankind will eventually require energy sources beyond fossil fuels which are consistent with sustained development. This issue of long-term energy supply deserves attention today, for even under the most favorable assumptions the world energy demand is expected to double over the next fifty years.

The challenge to develop understanding of fusion-plasma science has proved more challenging than envisioned at the outset, but progress has accelerated over the past few years. During this time, research has focused on the tokamak approach as demonstrably the most successful experimental means for achieving and studying fusion plasmas. A representative list of recent significant achievements in the U.S. tokamak program includes:

- Development of several sophisticated instruments for measuring internal plasma properties, e.g., direct measurement of the internal magnetic field orientation and, thereby, the distribution of plasma current in both DIII-D and TFTR;
- Achievement of record levels of confined plasma beta-value (pressure) in DIII-D with firm understanding in magneto-hydrodynamic theory;
- Production of over 10 megaWatts of fusion power using deuterium-tritium fuel in TFTR;
- Considerable advance, by no means complete, in the understanding of energy and particle transport in the ambient low-level turbulent fields.
- Achievement and understanding of several enhanced-confinement operating conditions, most recently in DIII-D and TFTR, bringing about performance in these machines beyond their design values; and
- Development and preliminary tests of components, like the radiative-divertor concept in DIII-D and Alcator C-mod for the handling of thermal exhaust heat, that will be crucial to a power-plant.

These accomplishments illustrate the recent rapid maturation of the science of fusion that has enabled progress in the laboratory. They represent a return on the past investments in the TFTR, DIII-D and Alcator C-mod facilities, as well as smaller experimental and theory/computational efforts throughout the nation.

In addition to these accomplishments in the laboratory, we have also made significant progress in our ability to predict plasma behavior by incorporating our understanding of the underlying physics into computational codes which analyze and model plasma behavior in the complex environment internal to a fusion machine. The accompanying figure illustrates progress in key areas since the 1970's arising from progress in both our basic understanding and our techniques of modeling. The "predictive capability" described there is an ultimate goal of the supporting science program, and the long term objective is to have this capability in all areas.

We are today faced with critical decisions of when and how to proceed to the more costly steps of actually demonstrating fusion. The International Thermonuclear Experimental Reactor (ITER) project, now in the Engineering Design Activity (EDA), represents an intent by the nations of the world to share the costs of the next step to include the important demonstration of ignition, or self-heated nuclear burn. The decision whether and how to proceed to ITER construction is expected in 1998.

Last year, faced with severe budgetary constraints, the Congress instructed the U.S. program to develop a reduced set of fusion objectives consistent with level-of-effort funding for the foreseeable future. This guidance called for a radical restructuring of the program away from embarkation on fusion energy demonstration. Fusion was instructed to develop a restructure plan that both preserves a strong domestic base program and continues U.S. participation in the international program, but does not require large new domestic facilities.

The DOE Fusion Energy Advisory Committee (FEAC) has responded with recommendations that recast the mission of the U.S. program to one preparing the scientific and technological foundations for fusion, with fusion energy development to be carried primarily as part of an international program, such as ITER. This recommendation was based on a intensive six-week study of the program carried out by a policy subcommittee drawn mostly from outside the program and supported by a technical subcommittee of expert scientists drawn from the program. The FEAC concluded that the Congressional action had forced the abrogation of U.S. leadership in fusion development to our international partners and that the U.S. strategy should now be to define and secure niche or supporting roles.

In effect, in the new plan the deliverable for the restructured domestic program becomes a developed knowledge base, as opposed to a demonstration, with fusion energy remaining the enduring long-term goal. The priorities of the current experimental facilities are to be reoriented accordingly in the nearer term. Fusion research has always had two important components: demonstrating progress in the laboratory facilities needed to reproduce stellar conditions on earth and advancing the body of supporting knowledge, called fusion science. The strategy of fusion here-to-fore has been to develop fusion science but as support for the purpose of advancing demonstrations of fusion progress, an approach that required a sequence of increasingly costly devices. Under the new strategy, the focus is on the science itself.

In focusing on developing a knowledge base, the new plan for the U.S. domestic program strengthens support of basic plasma physics, broadens the fusion approaches investigated, and emphasizes innovation throughout. It seeks to apply the knowledge gained from the tokamak to develop improvements and variants to the tokamak which might have more attractiveness as a power-plant concept. In pursuing the more energy-development aspects of fusion as a partner internationally, the U.S. will participate in ITER to the degree consistent with the available funding and with an appropriate balance with the domestic program. Although this new plan continues an advance towards fusion energy, it will certainly stretch the program out and delay any demonstration power plant to the indefinite future.

Several benefits should flow from the new strategy -- a wider development and application of the underlying fusion and associated basic sciences; a wider scientific participation in, and contribution to, fusion research; and a broader spectrum of fusion approaches investigated. The new approach also offers lower costs. First, the domestic facilities are used to develop the science base, with the more costly fusion demonstrations to be carried out internationally. Second, the emphasis on the science can reasonably be expected to reap rewards in fusion improvements, or even new approaches, that reduce both the costs of intermediate steps and the cost of ultimate fusion energy.

A word of warning is in order, however. The new program makes advances by exploiting existing facilities. It does not have provision for the next generation of facilities which will be needed after the year 2000. TPX was to have played this role; its demise does not erase the need. This is an issue that will loom larger as current facilities age and exhaust their productive lifetimes.

The FEAC identified $250M as the minimum annual funding necessary to meet the Congressional guidance and the strategy to satisfy it (funding in FY95 was $365 M; in FY96, $244 M). However, FEAC strongly urged funding at $275M/yr as allowing a much more productive and cost effective program. The $275M-level would permit:

- support for basic plasma physics and non-tokamak alternatives,
- strengthened operations of DIII-D and Alcator C-mod in tokamak physics supporting the ITER design and tokamak improvements,
- modest support for enabling technologies,
- preservation of the U.S. ITER participation, and
- completion of TFTR research into burning-plasma phenomena in FY98.

At the $250M-level, the TFTR operations would cease in FY97 and the other areas could be pursued less aggressively. Funding below $250M/yr. would be insufficient to meet the Congressional guidance and would require reexamination of the entire FEAC strategic approach.

The DOE has embraced the FEAC conclusions, while noting that the $250M-program requires an additional $15M in close-out costs which the FEAC did not include. We, therefore, expect an Administration fusion request for FY97 in the range $250-275M. Although we in the fusion community would prefer a more aggressive fusion energy program, to include a strong science component, we recognize national constraints. Therefore, we will strongly support the Administration request. The new plan is responsive to the guidance of the Congress, and this funding will certainly support a scientifically productive program for the remainder of the decade.

In conclusion, the DOE has worked through the FEAC to restructure the U.S. fusion program in a way that is responsive to Congressional guidance. The new plan is sound in identifying a strategy whereby the U.S. can continue to develop the scientific and technical foundations of fusion energy while working with the international community to carry out fusion energy demonstrations. A level of funding in the range of $250-275 M/yr is required to execute this new plan, with the higher figure yielding a much higher than proportional return on investment. This new approach represents a significant departure from the past fusion strategy which had emphasized fusion demonstrations within the domestic program. I strongly urge that the Congress join the Administration in supporting the new DOE fusion plan.

PROGRESS IN DEVELOPING TOKAMAK PHYSICS UNDERSTANDING

Issue	Past Progress		Future*
	Early 1970's	Year 1995	Year 2000
Equilibrium	?	✓✓	✓✓
MHD stability	?	✓✓	✓✓
Energy transport	?	✓ (scaling ✓✓)	✓✓
Particle transport	??	✓	✓✓
Control of impurities	??	✓	✓✓
Helium ash removal	??	✓	✓✓
Plasma heating	?	✓✓	✓✓
Self-heating (α-physics)	??	?	✓
Noninductive current drive	??	✓✓	✓✓
Steady state	??	?	✓
Low activation structural materials	??	?	✓
Advanced Tokamak power plant optimization	??	?	✓

Key:
?? = completely unknown
? = primitive
✓ = significant understanding
✓✓ = predictive ability

*With $275M annual funding for base program and ITER EDA.

Mr. MYERS. As you know, this committee, for at least the last 25 years, has been a supporter of the fusion programs. Maybe 25 or 26 years. We were over-promised by the Department of Energy. We have been disappointed in the lack of any accomplishments that we had been promised. Two of us were on the committee 26 years ago, so we have memories.

But maybe we are partly responsible. In fact, we have been unable to fund it. It has been a tremendous cost and it was one that the committee felt last year that we had to make some decision on if we are going to go with ITER and with our own domestic fusion program, so we asked the Department to make those decisions. We will be glad to work with you.

Mr. BALDWIN. The job was a harder one that it was envisioned at the outset. We are now trying to put in place a program that will see us through the long haul. So thank you very much.

Mr. FAZIO. Mr. Chairman, may I ask one question. I wonder, Mr. Baldwin, where you think this international collaboration is most likely to occur? Where do you see the demonstrations, the fiscal plant activity, taking place?

Mr. BALDWIN. The focus of this international program right now is the ITER, the international. It is only a design project right now. I think, realistically speaking, unless there is really a change of heart in this country we will certainly not host it. The host will pay a larger than equal share. We probably will not even be a so-called equal partner. We will be some kind of, I don't want to use the term junior, but a lesser partner.

Two of the other partners have very strong interest. Three of the other partners do. One is Russia, and cannot have many ambitions for construction. The Japanese are keen to construct the machine. Europeans, a wider spread, but I would also characterize them as keen.

I suspect that the Japanese will come forward with a proposal to host the machine, paying quite a high fraction, and that they will very much want the U.S. involved for the reason of the validity that we bring to the project and the scientific capability we bring. And in that sense I think it represents a real bargain, if I may use the word, for the U.S. to be able to participate on that basis.

Mr. FAZIO. Thank you.

Mr. MYERS. Well, thank you, Mr. Baldwin.

THURSDAY, FEBRUARY 29, 1996.

FUSION PROGRAM

WITNESS

RONALD C. DAVIDSON, DIRECTOR, PRINCETON UNIVERSITY PLASMA PHYSICS LABORATORY

Mr. MYERS. Next is Ronald Davidson, Director of the Princeton University Plasma Physics Laboratory. Welcome back, and your prepared statement will be placed in the record, and you may proceed for 5 minutes as you like.

Mr. DAVIDSON. Chairman Myers, members of the committee, thank you for the opportunity to testify before this committee on behalf of the DOE's Princeton Plasma Physics Laboratory and in support of the Restructured Fusion Energy Sciences Program recommended by the Fusion Energy Advisory Committee.

The Restructured Fusion Energy Sciences Program represents a renewed commitment to research on the underlying scientific and technological foundations of fusion, and a significant deemphasis, as the previous speaker noted, on the development and deployment of fusion energy within the U.S.

Last year's congressional decision to reduce U.S. funding for fusion research by 33 percent has necessitated this major change in direction for the program. The U.S. fusion program is no longer a schedule-driven undertaking, projecting requirements for large budget increases in the out years. Indeed, at the Princeton Plasma Fusion Laboratory this past year we went through a 33 percent staff reduction. We laid off about 270 very capable people, and over the past 3 years we have laid off 550.

Instead of planning to move rapidly into fusion energy development in the U.S., the domestic program will concentrate its efforts on fusion science and concept innovation and leverage its efforts through international collaboration with the larger fusion programs in Europe and Japan.

Let me say a few words about the role of the Princeton Plasma Fusion Lab and the Tokamak fusion test reactor.

As the only single purpose laboratory funded by the U.S. Department of Energy for research on fusion, the Princeton Plasma Fusion Lab has a long and distinguished tradition as the premiere national center developing the underlying theoretical and experimental foundation of plasma physics and related technologies, and in the education and training of graduate students in plasma physics and engineering.

In turn, these advances, and many of the personnel trained in fusion at Princeton and many other institutions around the Nation, have had a major impact in many areas beyond traditional fusion science and engineering. These include astrophysical plasmas, plasma processing for industrial applications, advanced computing architectures, theory and instrumentation techniques for space plasmas in the near-earth environment, and nonlinear dynamics, chaos, and turbulence, to mention just a few examples.

I will now turn to investigations on the Tokamak fusion test reactor. The Fusion Energy Advisory Committee noted, and I quote, TFTR is a $1 billion class facility now in a period of extraordinary productivity exploring newly discovered confinement regimes in a deuterium-tritium (DT) environment, end of quote. The TFTR device is unique in the world program. It operates routinely with 50/50 mixtures of deuterium-tritium plasma, and is providing critical scientific information on the effects of alpha particles produced in the fusion process.

The TFTR device produces the world's highest temperature plasmas, which together with the state-of-the-art diagnostics to measure properties of the hot plasma, and the close coupling to theory, makes TFTR an ideal instrument for probing the frontiers of fusion plasma science.

Currently, it is the most scientifically productive fusion research facility in the world and I, in the testimony submitted for the record, I describe in some detail the plans for experiments during fiscal year 1997.

In summary, I would say the large reduction in fusion funding in fiscal year 1996 really has forced a reconsideration of the goals of the fusion program. I believe the U.S. fusion community is united in renewing its commitment to fusion energy science and to innovative fusion concepts. I personally believe in fiscal years 1997 and 1998, TFTR is positioned to make dramatic scientific contributions in these areas and must be exploited as recommended by the Fusion Energy Advisory Committee.

In conclusion, I would like to thank you for your support for the fusion program over the years. I recommend a strong congressional commitment to the new fusion energy sciences program, and I urge you to support the program at the $275 million level in fiscal year 1997, which was recommended by the Fusion Energy Advisory Committee. Such a commitment is essential to the Nation's long-term economic and energy security. There are many institutions involved in this program with extremely fine capabilities. I believe support for this program is essential to the continued health and vitality of plasma science and technology in the U.S. as well.

[The statement of Mr. Davidson follows:]

Statement of Ronald C. Davidson
Director, Princeton Plasma Physics Laboratory
before the
U.S. House of Representatives Committee on Appropriations
Energy and Water Development Subcommittee
February 29, 1996

Chairman Myers, Members of the Committee -- thank you for the opportunity to testify before this Committee on behalf of the Department of Energy's Princeton Plasma Physics Laboratory, and in support of the restructured Fusion Energy Sciences program recommended by the Fusion Energy Advisory Committee, (FEAC).

Restructured Fusion Energy Sciences Program

The restructured Fusion Energy Sciences program represents a renewed commitment to research on the underlying scientific and technological foundations of fusion, and a significant de-emphasis of the development and deployment of fusion energy technologies in the United States. Last year's Congressional decision to reduce U.S. funding for fusion research by 33% has necessitated this major change in direction for the program. The U.S. fusion program is no longer a schedule-driven undertaking, projecting requirements for large budget increases in the out years. With the cancellation of the Tokamak Physics Experiment (TPX), and the recognition that the U.S. will likely be at most a minor participant in the construction of the International Thermonuclear Experimental Reactor (ITER), large new facilities are no longer on the immediate horizon. Instead of planning to move rapidly into fusion energy development in the United States, the domestic program will concentrate its efforts on fusion science and concept innovation, and leverage its efforts through international collaboration with the much larger programs in Europe and Japan.

Role of the Tokamak Fusion Test Reactor (TFTR)

As noted by the Fusion Energy Advisory Committee, "TFTR is a one-billion dollar class facility now in a period of extraordinary productivity exploring newly-discovered confinement regimes in a deuterium-tritium (D-T) environment." The TFTR device is unique in the world program. It operates routinely with 50/50 mixtures of deuterium-tritium plasma, and is providing critical scientific information on the effects of alpha particles produced in the fusion process. The TFTR device produces the world's highest temperature plasmas, which together with state-of-the-art diagnostics to measure properties of the hot plasma, and the close coupling to theory, makes TFTR an ideal instrument for probing the frontiers of fusion plasma science.

As a measure of productivity, over the past two years since the beginning of deuterium-tritium experiments on TFTR, scientists from Princeton and its national and international collaborators working on TFTR have published a larger number of articles in major refereed scientific journals than any other experimental fusion research team in the world. These scientists have elucidated the neoclassical physics of tearing modes, a key plasma instability which changes dramatically in high-temperature plasmas such as TFTR. They have made detailed measurements of the behavior of the energetic particles produced by fusion reactions, and of the helium ash slowed down in the plasma. They have also studied how plasma fluctuations eject the energetic fusion particles. Most recently they have discovered a completely new, dramatically improved mode of plasma confinement, the Enhanced Reversed Shear mode. This exciting mode of operation, predicted by the team which designed the Tokamak Physics Experiment, promises to open up new vistas both for the tokamak approach to a fusion power source, and for further scientific experimentation on TFTR.

During fiscal year 1997, experiments on TFTR will focus on the following scientific investigations:

- Use the newly discovered Enhanced Reversed Shear mode of operation to further reduce the loss of plasma energy and particles by modifying the twist of the magnetic field lines, and develop a fundamental understanding of the underlying physical processes.
- Study and understand the self-heating of fusion plasmas by burning increasing amounts of deuterium-tritium fuel, the actual fuel that will be used in a fusion power source. As noted earlier, TFTR has unique capabilities to routinely operate with deuterium-tritium plasma, and to employ sophisticated diagnostics to understand the results.
- Explore the development of "internal barriers," produced inside the plasma by radio frequency waves, that would reduce the energy and particle losses, while providing the plasma control required for more efficient and lower-cost fusion power sources.

We strongly support the recommendation by the Fusion Energy Advisory Committee (FEAC) that research on TFTR should continue for two more years, in order to exploit as fully as possible its scientific potential.

Role of the Princeton Plasma Physics Laboratory as a National Center for Fusion Science

As the only single-purpose laboratory funded by the U.S. Department of Energy for research on fusion, the Princeton Plasma Physics Laboratory has a long and distinguished tradition as the premier national center developing the underlying theoretical and experimental foundations of plasma physics and related technologies, and in the education and training of graduate students in plasmas physics and engineering. In turn, these technical advances, and many of the personnel trained in fusion, have had a major impact in many areas beyond traditional fusion science and engineering, including astrophysical plasmas, plasma processing for industrial applications, advanced computing architectures, theory and instrumentation techniques for space plasmas in the near-Earth environment, and nonlinear dynamics, chaos and turbulence in complex systems with many degrees of freedom, to mention just a few examples.

In the period after experimentation on TFTR is completed in fiscal year 1998, we anticipate a vibrant program of fusion energy sciences at the Princeton Plasma Physics Laboratory (PPPL). We are currently designing a new intermediate-scale experiment, called the "spherical tokamak," which is intermediate in magnetic configuration between an "alternate concept" and a "tokamak". In collaboration with the Oak Ridge National Laboratory, the University of Washington, and Columbia University, we are proposing to begin construction of the National Spherical Tokamak Experiment (NSTX) in fiscal year 1997. Since the facility design re-uses existing equipment from previous fusion experiments conducted at Princeton, its construction cost will be in the range of only $20M, but it will put the U.S. at the forefront of research on this exciting new concept.

In addition to performing research on NSTX, scientists from Princeton will collaborate both nationally and internationally on key experiments which contribute to the advancement of fusion science. This will include collaborations on domestic facilities such as Alcator C-Mod at the Massachusetts Institute of Technology and the

DIII-D tokamak at General Atomics, and on international facilities such as the Joint European Torus in Europe, the JT-60 Upgrade device in Japan, and the LHD stellarator in Japan. Our scientists and engineers are also taking on an increased role in ITER engineering design activities. The Princeton Plasma Physics Laboratory intends to broaden and enhance its role as a national and international center for excellence in fusion science.

Other experimental options are being considered for exploitation in parallel with research on NSTX. First, there are exciting scientific opportunities to pursue by resuming experimental operation of the intermediate-scale device called the Princeton Beta Experiment-Modification (PBX-M). A new technique for generating a favorable barrier to transport, using ion Bernstein waves, was predicted theoretically by scientists at the University of California at San Diego and discovered experimentally on PBX-M. More work is needed to fully understand this powerful new tool for plasma control. The PBX-M device is also uniquely well suited to develop feedback techniques to control the global instabilities that lead to disruptions in tokamaks, a key issue of scientific interest and for the ultimate feasibility of a tokamak fusion power source. A second option would be to pursue a different alternate concept device in parallel with NSTX.

In addition to a strong domestic program, it is clear that the U.S. must also maintain a strong effort in international collaboration. The Princeton Plasma Physics Laboratory intends to play a strong leadership role in this important area. Furthermore, if ITER goes forward into construction at the end of its engineering design phase, we would propose to serve as the coordinating Laboratory for U.S. participation, both in construction and in operation.

Conclusions

The large reduction in fusion funding in fiscal year 1996 has forced a reconsideration of the goals of the U.S. fusion program. The U.S. fusion community is renewing its commitment to fusion energy science and to innovative fusion concepts. In fiscal years 1997 and 1998, TFTR is positioned to make dramatic scientific contributions in these areas, and must be exploited as recommended by the Fusion Energy Advisory Committee. In the longer term, the Princeton Plasma Physics Laboratory proposes to operate an exciting new alternate concept device, NSTX, and options exist to restart the PBX-M facility with an important focus on fusion science, or to exploit the possibilities for other alternate concepts such as the stellarator. National and international collaboration will become an increasingly important part of the Princeton program during this time period.

In conclusion, let me thank you for your support of the fusion program over the years. I recommend a strong Congressional commitment to the new Fusion Energy Sciences program, and urge you to support the program at the $275M level in fiscal year 1997 recommended by the Fusion Energy Advisory Committee. Such a commitment is essential to the nation's long-term economic and energy security. It is also essential to the continued health and vitality of plasma science and technology in the United States.

Mr. FRELINGHUYSEN [presiding]. Mr. Davidson, it is good to see you here and I have been learning at the feet of both Mr. Bevill and Mr. Myers, whose service I know you acknowledge has been really tremendous in all areas, energy areas.

I am particularly interested in what is going on at Princeton. I think the whole fusion program is important, but I am particularly interested in what is being done domestically and I certainly have not been shy about being an advocate. I think most of us on this committee know that the restructuring has not been easy.

But certainly I think we need to press forward. We need to better educate all Members of Congress and the general public about the important work that you and others are doing in the fusion community.

I think our fate nationally in some ways is very much tied to your success. A lot of money has been invested, and we certainly want to see a rate of return. But certainly on behalf of the committee—I know I have worked with other members of the committee to support your program, that we will continue to do what we can to assist you.

Mr. DAVIDSON. Congressman Frelinghuysen, we certainly appreciate your support for the national fusion effort during the last budget cycle. I would also like to wish the Chairman and also previous Chairman Bevill a very exciting time in their post-congressional years.

Mr. MYERS. Well, thank you very much. Sorry we weren't able to do more, and certainly we seized as much as we could last year. We were faced with a very difficult situation, which doesn't look a whole lot better this year, but it is a little bit early to make those kind of comments.

Thank you very much for your testimony.

THURSDAY, FEBRUARY 29, 1996.

SUPERCONDUCTIVITY

WITNESS

ARDEN L. BEMENT, JR., DIRECTOR, MIDWEST SUPERCONDUCTIVITY CONSORTIUM

Mr. MYERS. Dr. Arden Bement, who is the Director of the Midwest Consortium of Superconductivity. Your prepared statement will be placed in the record, and you may proceed as you would like.

Mr. BEMENT. Thank you, Chairman Myers, members of the subcommittee. I also appreciate the opportunity to address the subcommittee on the Midwest Superconductivity Consortium, or MISCON.

MISCON is a partnership involving six leading academic institutions and 17 industrial or national laboratory affiliates. Our member universities are Purdue University, Indiana University, University of Notre Dame, the University of Missouri, Ohio State University and the University of Nebraska. Three new affiliates joined us in 1995: the DuPont Superconductivity Organization, the Jet Propulsion Laboratory and Plastronics, Incorporated.

I would like to begin by telling you why I believe MISCON is an important program for the Nation and how it is contributing to U.S. leadership in this critical field.

First, MISCON is providing new knowledge and loads of inquiry for a technology that will have very high payoff in the 21st century. High temperature superconductors will not only greatly improve the efficiency with which energy is generated, distributed, stored and converted but will also make possible medical instruments, scientific instruments, sensors, computers and telecommunication systems with dramatically improved performance. Primitive prototypes of these systems are already under development.

In 1995, MISCON contributed 27 highly significant accomplishments in the form of new processing technologies, new understandings in transport behavior in these materials. During the year, MISCON investigators published 75 peer review papers and gave 133 conference presentations.

Secondly, MISCON is one of the few multi-university research consortiums in the United States. It represents an important model for how universities can share talent, facilities, capabilities and interdisciplinary insights in tackling highly complex scientific problems and also in conserving scarce resources. We believe that such multi-university consortia will be imperative in the future in the face of reduced Federal R&D funding.

Thirdly, MISCON is a true government-industry-university partnership. We are partnered with four national laboratories and are carrying out five joint projects with industry to transfer our technology. These projects involve advanced developments of magnetic bearings, superconducting transmission cables, magnetic property measurements and superconducting thin film deposition techniques. In 1995, MISCON investigators engaged in over 80 separate collaborations with companies, national laboratories and universities.

Fourthly, MISCON is providing graduate talent in this important field to industry, Federal laboratories and universities. In 1995, MISCON universities granted nine Ph.D.s and three Masters Degrees to students working on MISCON projects.

The members of the MISCON constortium are extremely grateful to you, Chairman Myers, for your leadership and also for the sustained support of the subcommittee over the past five years.

As we enter our sixth year, we are witnessing not only exciting new discoveries in high temperature superconductors but also rapidly growing markets for magnetic resonance imaging systems, cellular telephone receivers, magnetic sensors and transmission cables employing these materials.

For fiscal year 1997, we are requesting $3.5 million to sustain our basic research activities in support of these important developments, and this amount of money will also provide $150,000 for new instrumentation and will also permit the selective augmentation of programs that show very high-tech logical promise.

Thank you, Mr. Chairman, and I hope sincerely that in the future we will see you more often on the campus of Purdue University.

Mr. MYERS. It has been Purdue day here. Well, thank you very much, and thanks for the work you are doing and for your testimony this morning.

[The statement of Mr. Bement follows:]

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Testimony Before the

ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS
COMMITTEE ON APPROPRIATIONS

UNITED STATES HOUSE OF REPRESENTATIVES

February 29, 1996

Summary of Request: The Midwest Superconductivity Consortium supports competitive projects coupling Midwest universities with industry in research on applications of high temperature superconductor materials. The Consortium requests $3.5 million in FY 1997 to sustain the high productivity of existing projects, provide key instrumentation of high leverage to the consortium and to augmented selected projects that show high technological promise.

Dr. Arden L. Bement, Jr., Director
Midwest Superconductivity Consortium

Mr. Chairman and members of the Subcommittee, my name is Arden Bement and I am the Director of the Midwest Superconductivity Consortium (MISCON), a cooperative endeavor among six leading academic institutions and the private sector. I am appearing before you today on behalf of the Consortium to report on the progress of the Consortium over the past year and to request continuing support for Fiscal Year 1997.

Membership of this six-member Consortium includes Purdue University, Indiana University, University of Notre Dame, The Ohio State University, The University of Missouri, and The University of Nebraska. The basic mission of the Consortium is to advance the science and understanding of high-T_C superconductivity and to promote the development of both new materials and improved processing technologies for the commercialization of superconductivity. Focused group efforts, resource sharing and close industry affiliations are key characteristics of the Consortium. The goals of the Consortium are:

a. to develop, utilizing effective group efforts, the scientific and technology foundation for industrial applications and commercialization of high-temperature superconductivity;
b. to facilitate the transfer of technology from the Consortium research laboratories into industry; and
c. to ensure that there is a continuing supply of engineers and scientists trained in this important field.

The programmatic research continues to focus upon key materials related problems in two areas. The first area has a focus upon the **synthesis** and **processing** of high-T_C superconducting materials. The second area focuses on understanding limiting features in the electrical **transport properties** of these materials. Solutions to these problems are essential to industrial developments of components and systems using high-temperature superconductors and to the transport of very high electrical current densities over a range of magnetic fields required of these components and systems.

The two focus areas of research involve twenty-six (26) research projects, thirty-six (36) principal investigators, fifty-three (53) graduate students, thirteen (13) postdoctoral associates, and sixteen (16) undergraduate students. MISCON employs three types of measurements of programmatic success:

1. **National impact:** such as significant scientific achievements, degrees granted, and publications in peer reviewed journals,
2. **Technology transfers:** such as affiliations, visits and other specific interactions that support significant technological developments,
3. **Collaborations:** such as joint research, exchanges, seminars, and shared use of special MISCON instrumentation.

Substantial achievements were made in all three categories during the past year, making 1995 an outstanding year. I would like to highlight the accomplishments in the remainder of my testimony.

Research results under MISCON in the past year were published in seventy-five (75) peer reviewed papers, with twenty-three (23) accepted and twenty-nine (29) more submitted for publication. Furthermore, the participants gave over one hundred thirty-three (133) talks or conference presentations.

MISCON takes special interest in its education **mission to ensure that there is a continuing supply of engineers and scientists trained in this important field.** Nine (9) Doctor of Philosophy degrees, three (3) Master's degrees and two (2) B.S. degrees were granted during the past year to students working on MISCON projects. MISCON graduates continue to be in demand by industry and academia. Of the 1995 graduates, two (2) were employed by industry, two (2) received academic appointments, seven (7) are pursuing post-doctorate training, and the remaining three (3) are continuing their graduate education.

Since the beginning of the program, MISCON has promoted collaborations not only among MISCON investigators but also with investigators in industry, national laboratories, and other universities. Of interest in these collaborations is not only developing and transferring technology but also leveraging research capabilities and productivity within MISCON. These collaborations continued to grow. During the past year alone, MISCON investigators were involved in two (2) MISCON group meetings; a MISCON Summer School on "The Josephson Effect and its Applicability to High-Temperature Superconductors"; eighty-one (81) collaborations with industry, universities and national laboratories; and fifty-four (54) exchanges of samples and measurements.

In order to establish stronger links with industry, MISCON has an affiliates program based on formal, sustained collaborative efforts agreed to by both parties (not fees). Affiliations, technology transfer activities and equipment access agreements were expanded during the year. The number of actively participating affiliates increased to seventeen (17) with the addition of **American Superconductor Corporation** (Westborough, MA), **DuPont Superconductivity** (Wilmington, DE), **Jet Propulsion Laboratory** (Pasadena, CA), and **Plastronics, Inc.** (Troy, OH). The other thirteen (13) affiliates are: **AT&T Bell Labs** (Murray Hill, NJ), **HYPRES, Inc.** (Elmsford, NY), **IBM Thomas J. Watson Research Center** (Yorktown Heights, NY), **Intermagnetics General Corp.** (Guilderland, NY), **Keithley Instrument Co.** (Solon, OH), **Lake Shore Cryotronics, Inc.** (Westerville, OH), **the National Institute of Standards and Technology** (Gaithersburg, MD and Boulder, CO), **Quantum Magnetics** and **Quantum Design** (San Diego, CA), **Ribbon Technology Corp.** (Gahanna, OH), **Superconductive Components, Inc.** (Columbus, OH), **TRW, Inc.** (Redondo Beach, CA), **The Weizmann Institute of Science** (Rehovot, Israel), and **Wright Patterson, AFB** (Dayton, OH).

Examples of joint projects with affiliates are: (1) a project to automate magnetic property measurements between Purdue University and Quantum Design, (2) a project between Notre Dame University and Superconductive Components, Inc. to develop a high temperature superconductor with superior properties for magnetic bearing applications, (3) a project between Ohio State University and Superconductive Components, Inc. Fabricating doped powders for film deposition targets, (4) a project to study the effects of ac magnetic fields on superconducting ac currents between American Superconductor Corp. and Purdue University, (5) a project to study the response of far-infrared on YBCO thin films between HYPRES Corp. and the University of Notre Dame, and (6) a project between Plastronics, Inc. and the University of Notre Dame to produce powder-in-tube $YBa_2Cu_3O_x$/Ag-Pd composite wires. In addition, Purdue University is seeking industry partners for a newly patented process developed under MISCON for producing tubular superconductive tubes to shield sensitive electronic equipment from electromagnetic interference. These interactions keep all participants aware of industry's needs for new knowledge and the current state of commercial technology in high-T_C

superconductivity and provide high leverage in introducing MISCON-developed technologies into the marketplace.

MISCON contributed important new materials processing technologies and new understandings of transport behavior in high-T_C superconductors. The following seven "first-time" achievements exemplify the twenty (20) identified as "highly significant" in 1995:

- G. Lafyatis, The Ohio State University, **made the first measurement by an atomic-beam imaging technique of the vortex state in a YBCO crystal.**
- S-H Liou, University of Nebraska-Lincoln, **fabricated (Hg,Tl)-1223 films with the highest T_c (133K at onset) yet reported for a superconducting film.**
- D.G. Stroud, The Ohio State University, **made the first calculation of the fluctuation magnetization in a high-T_c superconductor in excellent agreement with experiment.**
- E.P. Kvam, Purdue University, **demonstrated for the first time the ability of growing high-quality, biaxially-aligned, thin films of YBCO with distinctly different in-plane directions.**
- T.R. Lemberger, The Ohio State University, **made the first observation of two superconducting transitions in the exclusion distance for films composed of several alternating layers of Bi-2201 and Bi-2278.**
- K.H. Sandhage, The Ohio State University, and P.J. McGinn, University of Notre Dame, **developed a new method for fabricating YBCO/noble-metal microlaminates which takes advantage of the malleability of mixtures of yttria and barium powders.**
- H.A. Blackstead, University of Notre Dame, **observed for the first time dissipation from Josephson vortices in (Y,Pr)BCO.**

In accordance with MISCON policy, all fourth-year projects and all new proposals are reviewed by an independent external peer review panel. The 1995 peer review was conducted by ten (10) outstanding experts in the field of high-T_C superconductivity. Project decisions were then based on the results of this peer review. Prior to the review, one existing project was withdrawn: the goals had been completed. Consequently, seven fourth-year projects and eight new proposals were submitted to this outside panel for review. As a result of the panel's review, the seven ongoing projects were renewed and one of the new proposals was funded at a reduced level for the first year for a total of $85,000 for new starts. The peer review scoring is based on the NSF method which scores according to "excellent", "very good", "good", and "reject". The average score of all projects, as determined by the expert reviewers, is near the midpoint between "excellent" and "very good".

MISCON was appropriated $3.076 million in FY 1996. This level of funding along with carryover funds from FY 1995 will enable the Consortium to sustain its current projects and to support one new project for the University of Nebraska, the newest member of the Consortium (added in 1994).

We are requesting $3.5 million for FY 1997. This level represents an increase of $424K (13.8%) over the $3.076 million appropriated in FY 1996. The requested funding increase will permit a 3% cost-of-living adjustment for continuing projects ($68K), new instrumentation ($150K) that has high leverage for the consortium, and augmentation funds ($206K) for projects that show high technological promise.

We appreciate the support of the Subcommittee and look forward to continued progress towards the utilization of these new and exciting materials. Thank you, Mr. Chairman, for the opportunity to testify. I'll be happy to answer any questions you have.

LETTERS OF SUPPORT

MEMBERS:

Indiana University
University of Missouri
University of Nebraska
University of Notre Dame
Ohio State University
Purdue University

AFFILIATES:

American Superconductor Corporation
HYPRES, Inc.
IBM Thomas J. Watson Research Center
Jet Propulsion Laboratory
Keithley Instruments, Inc.
Lake Shore Cryotronics, Inc.
Plastronic, Inc.
Quantum Design
Superconductive Components, Inc.
TRW Superconductivity Research

INDIANA UNIVERSITY

THE PRESIDENT'S
OFFICE

Bryan Hall 200
Bloomington, Indiana
47405-1201

812-855-4613
Fax 812-855-9586

February 13, 1996

The Honorable John T. Myers
Chairman, Subcommittee on Energy
and Water Development
House Committee on Appropriations
2372 Rayburn House Building
Washington, D.C. 20515

Dear John:

I am pleased to write in support of the continued funding in FY 1997 for the Midwest Superconductivity Consortium (MISCON) by the House Appropriations Subcommittee on Energy and Water Development.

MISCON is a leader in research and development of high temperature superconductivity technology, and promotes collaborations among engineers and scientists in industry, national laboratories, and other universities. Its work highlights the value of research partnerships between universities and industry for the advancement of science and technology.

A goal of MISCON is to contribute to the national economy by facilitating the transfer of technology from research laboratories to industry. Moreover, the commercialization of the technology promises significant global trade advantages. For these reasons research and development in superconductivity is consistent with our nation's interest.

The projects at MISCON undergo rigorous peer review by independent experts from academic institutions, industry, and federal laboratories. This review process ensures that technologically sound projects of high potential are conducted by MISCON. The work carried out by MISCON has a high potential for contributing to a strong economy in the midwest, and to competitive advantages for the United States in the global marketplace.

I urge you to give positive consideration to the continued funding of MISCON.

Sincerely yours,

Myles Brand
President

ms

cc: Christopher Simpson

UNIVERSITY OF MISSOURI SYSTEM Columbia Kansas City Rolla St. Louis
OFFICE OF THE PRESIDENT 321 University Hall Columbia, MO 65211 Telephone (314) 882-2011

February 8, 1996

The Honorable John T. Myers, Chairman
Subcommittee on Energy and Water Development
House Committee on Appropriations
2372 Rayburn House Building
Washington, D.C. 20515

Dear Congressman Myers:

On behalf of the University of Missouri, I am pleased to express my strong support for the important work of the Midwest Superconductivity Consortium. MISCON is one of the major sources of new understanding, new technologies, and new techniques for learning how to use superconductive materials effectively. MISCON cooperates closely with industries exploring applications of high temperature superconductors. It is one of very few multi-university consortia in the country that have found effective ways to leverage their resources by providing both research results and research talent to industry.

I believe it is essential that the U.S. retain its current strong position in superconductivity research by maintaining strong federal support. Furthermore, I am convinced of the importance of maintaining the productive university research infrastructure that we now have in place in the Midwest. Thank you in advance for your continuing support of MISCON.

Sincerely,

George A. Russell

George A. Russell
President

gs

University of
Nebraska
Office of the President

Varner Hall
3835 Holdrege
P.O. Box 830745
Lincoln, NE 68583-0745
(402) 472-2111
FAX (402) 472-1237

February 19, 1996

The Honorable John T. Meyers
Chairman
Subcommittee on Energy and Water Development
House Committee on Appropriations
2302 Rayburn House Office Building
Washington, D.C. 20515-0114

Dear Chairman Meyers:

On behalf of the University of Nebraska, I am writing to express support for the activities of the Midwest Superconductivity Consortium ("MISCON").

The University of Nebraska is a relatively new member of MISCON, but I have been impressed with what I have learned about the important work of this consortium. The kind of research conducted by faculty at the six participating Universities is critical to efforts by the United States to be a leader in the development and commercialization of high-temperature superconductivity. The University of Nebraska is pleased to be able to contribute in this area through participation in the consortium. MISCON provides a successful model for a collaborative approach by industry, universities and the government.

MISCON is a government investment that offers positive and substantial returns, and I hope that your Subcommittee will continue to support its activities.

Sincerely,

L. Dennis Smith

L. Dennis Smith
President

cjb

Office of the President

Phone 219/631 6755
Fax 219/631 7428

University of Notre Dame
Notre Dame, Indiana 46556

February 7, 1996

Chairman John T. Myers
Subcommittee on Energy and Water
Development
House Committee on Appropriations
2372 Rayburn House Building
Washington, D.C. 20515

Dear Chairman Myers:

Government, industry, and the academic communities must each respond to the challenges with all of the talents and resources that are available to them in order to revitalize the United States economy. No single sector can achieve the success that the combined efforts will achieve.

The Midwest Superconductivity Consortium (MISCON) is one example of how six regional universities have joined together with industry and government to support an important, emerging technology area. The focus of MISCON is to develop the science and technology of high-temperature superconductors, facilitate the transfer of these technologies to industry and, perhaps most important, educate the next generation of men and women needed to continue progress in this technology.

MISCON Director, Dr. Arden L. Bement, Jr., has the opportunity to give testimony before your Committee on the details of the Consortium's recent activities. As you will see from Dr. Bement's remarks, it has been a busy and productive time for MISCON. We look forward to an even more successful future.

Cordially,

Edward A. Malloy, csc

(Rev.) Edward A. Malloy, C.S.C.
President

THE OHIO STATE UNIVERSITY

Office of the President

205 Bricker Hall
190 North Oval Mall
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Phone 614-292-2424
Fax 614-292-1231

February 21, 1996

The Honorable John T. Myers
Subcommittee on Energy and Water Development
House Committee on Appropriations
2372 Rayburn House Office Building
Washington, DC 20515

Dear Congressman Myers:

I am writing to express our continued support for the research activities of the Midwest Superconductivity Consortium. We must stimulate new technologies to develop competitive industries. And we must continue to invest in the basic research that has made America a leader in science and technology. We believe that the Consortium contributes significantly to both these goals.

By strengthening superconductivity research, the Consortium represents an investment and a collaboration in the best sense. It has provided critical funds for research projects and has advanced the training of students in this important field. Further, the interactions that have developed among faculty and students from various universities and industry researchers are a model for university/industry collaborators. These partnerships will help us successfully explore new frontiers that will contribute to the nation's economic prosperity and competitiveness.

The investment in MISCON is an investment in our country's future. We encourage continued federal funding for this important initiative.

Sincerely,

E. Gordon Gee

sc

American
Superconductor
CORPORATION

Two Technology Drive
Westborough, MA 01581
(508) 836-4200
(508) 836-4248 Fax

February 9, 1996

Chairman John T. Myers
Subcommittee on Energy and Water Development
House Committee on Appropriations
2372 Rayburn House Building
Washington, DC 20515

Dear Chairman Myers:

I urge your support for the MISCON program. Many elements of this program have been valuable to American industry. One example is the work of Prof. McElfresh at Purdue University in investigating the static and dynamic behavior of flux distributions in high temperature superconductors on a local level. This has revealed many important insights which are relevant to the application of these materials in the electronics and power industries.

Sincerely,

Dr. Alexis P. Malozemoff
Chief Technical Officer

PURDUE UNIVERSITY

STEVEN C. BEERING
PRESIDENT

February 7, 199

Chairman John T. Myers
Subcommittee on Energy and Water Development
House Committee on Appropriations
2372 Rayburn House Building
Washington, DC 20515

Dear John,

On behalf of Purdue University, I would again like to express support for the activities of the Midwest Superconductivity Consortium. We all recognize the tremendous potential that superconductivity could have in providing solutions to many current technological problems. To advance this technology, a necessary step is to understand the phenomena so that one could manufacture desired components for applications.

The complexity of the problems to be solved make it fruitful for cooperative activities among a wide range of interested parties. Such an approach indicates focused group efforts and the sharing of resources is necessary for the development of the scientific and technological foundation for the commercialization of high-temperature superconductivity. Further, the integration of the research work of the universities with the application needs of industry can facilitate technology transfer. In the international market of today, this coordination of efforts is a vital factor in success.

This Consortium brings to bear these multiple efforts to seek solutions for the future, and we at Purdue University are proud to be a part of the activities. With your continued support, we look forward to success in our goal to promote the applications of these exciting new materials. Purdue University plays a pivotal role in this Consortium and it has the full backing of my office.

Sincerely,

cc: A. L. Bement, Jr.

1031 HOVDE HALL, ROOM 200 • WEST LAFAYETTE, IN 47907-1031 • (317) 494-9708

HYPRES
Making Superconducting Electronics a Reality

Corporate Offices
175 Clearbrook Road
Elmsford NY 10523

(914) 592 1 90
Fax (914) 347 2239

February 8, 1996

The Honorable John T. Myers, Chairman
Subcommittee on Energy and Water Development
House Committee on Appropriations
2372 Rayburn House Building
Washington, DC 20515

Dear Mr. Myers:

I am writing in support of the Midwest Superconductivity Consortium's (MISCON) program in Superconductivity Research. The benefits of this consortium extend nationwide. Recognizing the importance of these benefits, HYPRES - located in the State of New York - has decided to join MISCON as a corporate affiliate in 1994. HYPRES' collaboration with Dr. Ruggiero of the University of Notre Dame is focusing on the physical properties of thin film materials for high performance electronics applications. These applications include advanced technologies for high performance communications networks. The work of the consortium establishes important and sound scientific foundations for progress in Superconductivity. This foundation is essential to progress in the field. Importantly, MISCON's activities accelerate the commercialization of Superconductivity Research, contributing to American competitiveness in this global economy.

Thank you for your consideration of this matter.

Very truly yours,

Elie K. Track
President and CEO

EKT/sjs

IBM

International Business Machines Corporation

Stuart Bermon
Thomas J. Watson Research Center
P.O. Box 218
Yorktown Heights, New York 10598

February 22, 1996

The Honorable John T. Myers
Chairman
Subcommittee on Energy and Water Development
House Committee on Appropriations
2372 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Myers:

This letter is to express my support for continued funding of the Midwest Superconductivity Consortium (MISCON). Professor M. McElfresh at Purdue University and myself have been collaborating on the study the magnetic shielding capabilities of high temperature superconductors. Magnetic shielding is an important component of many superconducting systems, particularly those incorporating superconducting quantum interference devices (SQUID's) for the detection of minute changes in magnetic fields. The IBM Research Division maintains a continuing significant research effort in this area as well as in the general electrical properties of high-temperature superconducting materials. Current work, under the general direction of Dr. Roger Koch, includes building SQUID based devices for detecting the presence of submarines and land mines, and for studying corrosion effects in metals. An additional SQUID project, being carried out jointly with Quantum Devices, Inc. involves monitoring magnetic fields of the heart to study cardiac function. Future planned projects, for which good magnetic shielding is important, include the detection of explosives and illegal drugs using nuclear quadrapole resonance.

Previously, our efforts in the area of shielding had concentrated on uses at low temperature. Our goal is to expand our understanding to include high temperature superconductors, where the potential applications are much greater. We have provided equipment for the research effort at Purdue University and are providing consultation on experimental design, measurement techniques and interpretation of data. Good progress has been made over the last year by the Purdue group in fabricating tubular shields of high-Tc material (BSCCO) using centrifugal slip-casting and in increasing the tube density using a newly developed hydrostatic pressing process. The work holds great promise of being to provide tubes with a shielding factor and size sufficient for the applications listed above. Scientists here at IBM Research consider the work at MISCON to be important to the work being carried on here and that it is vital for it to proceed.

Sincerely,

Stuart Bermon

Stuart Bermon, Ph.D

Jet Propulsion Laboratory
California Institute of Technology

4800 Oak Grove Drive
Pasadena, California 91109

(818) 354-4321

February 21, 1996

The Honorable John T. Myers, Chairman
Subcommittee on Energy and Development
House Committee on Appropriations
2372 Rayburn House Building
Washington, DC 20515

Dear Congressman Myers:

I am writing in order to express my support for the superconductivity research conducted within the Midwest Superconductivity Consortium (MISCON). I am leading a small group at the Jet Propulsion Laboratory that is applying high temperature superconductors to addressing NASA needs in of sensors and digital communications. I worked previously on superconducting integrated circuits in the IBM Research Division. In both cases, the available institutional resources were inadequate for completely self-sustaining efforts in superconducting electronics. Yet, in both cases outstanding results have been, and continue to be, obtained by leveraging other internal capabilities and through vital outside collaborations. In this latter capacity, I value my continued association with MISCON personnel, including Prof. M. McElfresh at Purdue University, Prof. L. Greene at the University of Illinois, and with Prof. S. Ruggiero at the University of Notre Dame.

I have been in superconductivity for over twenty years. There has been impressive progress in this time, much of which has been accomplished through collaborative efforts. It is very difficult at any institution to justify or support the wide range of physical and intellectual capabilities required of a sustained effort in this field, and it is only through sustained efforts that magnetometers and submillimeter wave sensors of record sensitivity, voltage standards, and other instruments have been developed. The real capabilities available with superconductive electronics can and will be realized if and only if institutions such as MISCON, which represent an important national knowledge and skills base, receive consistent support. I look forward to continued fruitful interactions with MISCON and enthusiastically urge you to continue support for it.

Sincerely,

Alan Kleinsasser

KEITHLEY

Joseph P. Keithley
Chairman, President and CEO

February 13, 1996

The Honorable John T. Myers,
Chairman
Subcommittee on Energy and Water Development
House Committee on Appropriations
2372 Rayburn House Building
Washington, DC 20515

Dear Congressman Myers:

We are a leading manufacturer of test and measurement equipment, with a focus on emerging high technology needs of research and industry. Superconducting materials and devices are going to be of important commercial value in the future. We presently make test equipment for this area and work with partners such as MISCON to develop new measurement methods and equipment to characterize superconducting materials and devices.

If the United States is to remain the leader in this field, it is essential that we have organizations such as MISCON who bring together the talents of many institutions in a geographical region and work with industry to commercialize products related to the field. Without such organizations, it will not be practical for industry alone to develop the materials, processes, and testing methods to commercialize superconducting devices.

We urge the Subcommittee on Energy and Water Development of the House Committee on Appropriations to continue funding MISCON in FY1997. This will provide the technology needed to put the US in a leadership position, and provide industry with the needed information and basic research to justify commercializing products in this field.

Sincerely,

Joseph P. Keithley

Keithley Instruments, Inc./28775 Aurora Road/Cleveland, Ohio 44139-1891/(216) 498-2684/FAX: (216) 248-6168

Chairman John T. Myers
Subcommittee on Energy and Water Development
House Committee on Appropriations
2372 Rayburn House Building
Washington, DC 20515

Feb. 19, 1996

Dear Mr. Myers:

For over 25 years Lake Shore Cryotronics, Inc. has been a world leader in the manufacture and sale of scientific instrumentation used in low temperature materials research. Since 1993, Lake Shore has been affiliated with the Midwest Superconductivity Consortium (MISCON).

In order for the United States to remain competitive and to play a significant role in the research and development and eventual commercialization of high temperature superconducting materials, it is imperative that consortia like MISCON continue to be appropriately funded.

We ask that the House Appropriation Committee's Subcommittee on Energy and Water Development continue its' funding of MISCON for FY 1997 so that MISCON may advance its' mission, thus insuring a prominent US role in the continued development of these superconducting materials.

Sincerely yours,

B. C. Dodrill
Research Scientist
Lake Shore Cryotronics, Inc.
64 E. Walnut St.
Westerville, OH 43081

LakeShore
Measurement and Control Technologies

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FAX 513-335-4559

February 19.1996

Chairman John T. Myers
Subcommittee on Energy and Water Development
House Committee on Appropriations
2372 Rayburn House Building
Washington, DC 20515

Dear Mr. Myers,

We are writing to indicate our desire to see you to continue to support the Midwest Superconductivity Consortium (MISCON). The continued support of high temperature superconductor research is important to the future of the U.S. economy. As a percent of GNP the Japanese and European community are out spending the U.S.

The MISCON group is performing research that is helping companies like Plastronic Inc. Plastronic Inc. is developing bulk high temperature superconducting wires and tapes for use in motors, generators, transformers, and transmission lines. Through the MISCON projects we are performing cooperative research with Notre Dame University and Ohio State University. We would appreciate our continued support of the MISCON consortium.

Sincerely,

Mike Tomsic
President

Corporate Headquarters
11578 Sorrento Valley Road
San Diego, CA 92121-1311
USA

Quantum Design

Tel 619 481 4400
800 289 6996
Fax 619 481 7410
E-Mail info@quandsn.com

February 22, 1996

The Honorable John T. Myers
Chairman
Subcommittee on Energy and Water Development
House Committee on Appropriations
2372 Rayburn House Building
Washington, DC 20515

Dear Sir:

I write this letter in support of the concept of MISCON and the high level of quality research that is currently being carried out by the members of this consortium. The type of technology transfer opportunities such organizations make available to U.S. industry enhances the competitive advantage of a traditional strength of this country. That is, the superior caliber of basic research done in our private and state-supported university systems.

As a member of the MISCON Industrial Affiliates Program, scientists at Quantum established a close working relationship with researchers in the Physics Department at Purdue University. Technically, our collaborative work has centered around the improvement of commercial instrumentation and test equipment. This has included developing a source in the United States for state-of-the-art electromagnetic shielding that will improve the quality of instrumentation in many fields, from medicine to manufacturing. In addition, there are new, high-resolution measurement techniques being developed by members of the MISCON team. Quantum Design is currently negotiating with MISCON a program for which this company will provide financial support.

The fundamental materials science that must be learned in the early stages of these projects would otherwise put this expensive undertaking out of reach for our company. Quantum's association with MISCON provides access to the latest findings in academic research, at some of this country's premier educational institutions.

We fully appreciate the collaboration and technical input from our MISCON colleagues at Purdue and hope that we will have the opportunity to continue this fruitful relationship.

Sincerely,

QUANTUM DESIGN

W. Barry Lindgren
President

Superconductive Components, Inc.

1145 Chesapeake Avenue, Columbus, OH 43212-2238, U.S.A.

Makers of High T_c Powders, Targets, Melt Textured Levitators, Educational Kits and other Novel Devices

February 9, 1996

Chairman John T. Myers
Subcommittee on Energy and Water Development
House Committee on Appropriations
2372 Rayburn House Building
Washington, DC 20515

Honorable Mr. Myers,

I am writing to ask your continued support of the Midwest Superconductivity Consortium (MISCON) under the leadership of Dr. Arden L. Bement, Jr., Director.

Superconductive Components, Inc. is working on energy storage using the concept of Frictionless Flywheels, which are made possible by superconducting levitation. Although the principle of flywheel energy storage has been known for a long time, the concept of levitation using the high temperature superconductors is new, and is based on technical breakthroughs accomplished at Argonne National Laboratories, and, is being commercially developed by us. The possibilities of storing energy efficiently and economically are very large.

The MISCON group is an important adjunct in helping us pursue our concept of Frictionless Flywheel Energy Storage (FFES). We are a member of this group, and MISCON has also funded on a modest scale, work we are doing that is important to FFES.

I therefore ask your continued support of MISCON.

Respectfully,

Edward R. Funk, President

Telephone (614) 486-0261 Faxphone (614) 486-0912
"Quality is 100% Customer Satisfaction"

TRW

TRW Space & Electronics Group

One Space Park
Redondo Beach CA 90278
310 812 4321

February 15, 1996
96.D351.AHS-001

The Honorable John T. Meyers
Chairman
Subcommittee on Energy and Water Development
House Committee on Appropriations
2372 Rayburn House Office Building
Washington, DC 20515-0104

Dear Sir:

I am writing in support of the MISCON research program on superconductivity, and its value to US industry and our nation's research and development efforts to apply superconductive electronics to national priorities in space, defense, and global competitiveness.

We will continue to benefit from the high quality research, collaborative working relationships, and the development of top quality engineers and scientists knowledgeable and skilled in superconductor thin films and devices which are critical to the manufacture and commercialization of superconductive electronics. I believe that this type of research will provide high leverage for the manufacture of quality devices, circuits, and components which will be critical to the new information age.

We look forward to continuing technical achievements and the production of future US industrial R&D employees by the Midwest Superconductivity Consortium.

Very truly yours,

Arnold H. Silver

Arnold H. Silver
Manager, Superconductive Electronics Organization
Electronics Systems and Technology Division

THURSDAY, FEBRUARY 29, 1996.

GEOTHERMAL RESEARCH AND TECHNOLOGY

WITNESS

P. MICHAEL WRIGHT, PRESIDENT, GEOTHERMAL ENERGY ASSOCIATION

Mr. MYERS. Dr. Michael Wright, President of the Geothermal Energy Association.

Dr. Wright, your prepared statement will be placed in the record, and you may proceed for 5 minutes as you like.

Mr. WRIGHT. Well, thank you, Chairman Myers, Mr. Fazio, Mr. Bevill and Mr. Riggs. I am glad to be back here before this committee. My name is Michael Wright, and I am Chairman of the Geothermal Energy Association.

Last year when I was here I told you about 2800 megawatts of new projects that our industry had won in Indonesia and in the Philippines, primarily, worth about $6 billion; and I wanted to give you just a brief update on those projects. They are all proceeding on schedule and normally, except one 100 megawatt project which is still in the financing stage. But they are really coming along well, and everybody is very pleased.

This year we obtained 144 more megawatts in the Philippines and Indonesia in contracts. By the way, the power demand in those countries is growing very rapidly, at a rate of 6 to 10 percent per year, the power demand, so we see this as a market for U.S. technology that will last, and we are really looking forward to working with those people.

Now, I think we can fairly say that this marketing success of our industry is due to superior U.S. technology and business know-how. We can't forget the business know-how because, of course, U.S. companies have probably more of that than anybody in the world.

In terms of technology, we have had a close partnership with the Department of Energy for a number of years in development of technology and have had a lot of success. I think our costs are coming down, we are becoming ever more competitive, and we appreciate the support of this committee in making this possible.

I know that sometimes you guys in government wonder whether money is well spent, and I can assure you that your investment in geothermal research has been a good investment, because it is now paying off. Not only are we able to develop this clean energy source in the United States but also bring it to the rest of the world.

Another point I would like to make is that our growth, the growth in geothermal energy production worldwide, is not limited by resource but is limited by technology. If we had better technology, if we could put more geothermal resources on line economically, we would be far, far ahead and, of course, so would the world.

We want to remain the technological leaders. We are closely followed by Japan and Italy. Japan is spending about $150 million a year on geothermal research, and it is hard to keep up with that kind of expenditure, that level of effort.

We would like to request that you support the geothermal energy budget and the Department of Energy at a level of $38 million. This is a level that we in the industry feel is necessary.

We have had a series of workshops over the past year to determine our technology needs, and these workshops have identified the primary areas where we need help. These are in the written statement, and I don't need to go into them here.

With a budget level of $38 million, we can say that lease and royalty payments to the Federal Government from geothermal production on Federal lands is about $30 million a year, so we are really not asking for much money at all. We almost pay for ourselves.

The industry will promise a cost-share of $50 million for this level, and we cost-shared about $50 million last year, so we have a good partnership going.

I would like to say a couple of words about the geysers area. We have a pipeline project that got started, I am happy to report, and we will be working—and the DOE will be working with the city of Santa Rosa to start another pipeline project. We hope to bring more water to that area. This water is needed for injection to maintain reservoir pressure.

I would also like to put in a plug for geothermal heat pumps. There is a geothermal heat pump consortium, and they are doing good work. This consortium will bring the benefits of geothermal to all parts of the country, and we very much support their program.

So I appreciate all of the help you have given us in the past and hope you can maintain that. Thank you very much.

Mr. MYERS. Thank you.

[The statement of Mr. Wright follows:]

GEOTHERMAL ENERGY R&D INVESTMENT FOR AMERICA'S FUTURE

Statement of the

GEOTHERMAL ENERGY ASSOCIATION

Presented before the

Subcommittee on Energy and Water Development
Committee on Appropriations
U.S. House of Representatives
February 29, 1996

Presented by

Dr. Phillip Michael Wright
President, Geothermal Energy Association

Phillip Michael Wright

POSITION: - President, Geothermal Energy Association, and Deputy Director, Earth Sciences and Resources Institute (ESRI), Department of Civil and Environmental Engineering, University of Utah.

EDUCATION:
- B.S. (High Honors), Geological Engineering, 1960, University of Utah.
- Ph.D., Geophysics, 1966, University of Utah.

SOCIETY AFFILIATIONS: American Association for the Advancement of Science, American Association of Petroleum Geologists, American Geophysical Union, Society of Exploration Geophysicists, Society of Economic Geologists, International Geothermal Association, Geothermal Resources Council, Utah Geological Association

PROFESSIONAL EXPERIENCE:

1/94-present	**President, Geothermal Energy Association**
12/94-present	**Deputy Director, ESRI**
8/85-12/94	**Technical Vice President, University of Utah Research Institute (UURI)**
5/84-12/94	**Director, Earth Science Laboratory, UURI**
9/78-5/84	**Associate Director, Earth Science Laboratory, UURI**
5/77-9/78	**Senior Geophysicist/Project Manager, Earth Science Laboratory, UURI**
3/69-5/77	**Chief, Geophysics Division - U.S. Operations, Kennecott Exploration, Inc., a subsidiary of Kennecott Copper Corporation**

RESEARCH INTERESTS:

- Geothermal energy, its nature, occurrence and economic development.
- Electrical tomography of the Earth's subsurface applied to environmental and resource-exploration problems.
- Integrated interpretation of geological, geophysical and geochemical data sets for subsurface exploration, especially for geothermal, mineral and environmental applications.
- Application of airborne and satellite remote sensing to geothermal, mineral and environmental studies.
- 64 publications, 55 technical reports, chapters in 2 books, numerous professional presentations.

GEOTHERMAL ENERGY R&D
INVESTMENT FOR AMERICA'S FUTURE

Statement of the
GEOTHERMAL ENERGY ASSOCIATION

Project: Geothermal Energy R&D.

Action Requested: Support the FY 1997 DOE Geothermal Division budget at $38 Million.

Mr. Chairman and members of the Subcommittee, my name is Dr. Phillip Michael Wright, and I am President of the Geothermal Energy Association. I am speaking today on behalf of my Association, which is comprised of nearly 50 U.S. companies that bring the benefits of clean, reliable geothermal energy to society.

Last year, I had the great pleasure of reporting to you that our industry had signed contracts for development of some 2,800 megawatts of geothermal power in Indonesia, the Philippines, and Latin America, projects valued at more than $6 billion. These contracts are in addition to the 1,200 megawatts of geothermal power already operating as a result of projects in foreign countries by our industry, and represent a dramatic breakthrough in marketing U.S. geothermal technology in developing countries. Today, I want to report that *development of these geothermal projects is progressing very well, with financing being obtained and on-site construction begun or planned in every area except one 100 megawatt project, which is still in the financing stage. Further, we continue to gain new power contracts. In the last year, U.S. companies won 144 megawatts more in new projects in the Philippines and Indonesia.*

To place these figures in perspective, the average U.S. nuclear power plant produces about 950 megawatts, and serves the residential needs of 1,000,000 Americans. Because geothermal power plants operate with such a high capacity factor (actual megawatt-hours of electricity produced per megawatt of installed capacity), our new geothermal projects will bring more actual energy into the economies of developing countries than would be produced by virtually any other type of power plant.

These marketing successes in international competition are a direct result of the superior technology the U.S. geothermal industry has been developing in close partnership with the Department of Energy. They were made possible through the support of the House Energy and Water Development Appropriations Subcommittee, and we are very grateful for this support. I know that sometimes you in government wonder whether or not Federal funds have a beneficial effect in our society and economy. Clearly, the investment this committee has made in geothermal technology development has been a wise investment. It has helped advance an environmentally clean worldwide energy source, provided critically needed power from indigenous resources in poorer countries, and has supported our industry in creating jobs here at home, to the benefit of all Americans. *We can truly say that geothermal energy delivers!*

Until recently, international markets were dominated by Italian and Japanese companies supported by their governments with low-interest financing, tied aid, and political intervention to win geothermal projects. Our competitors' success in actually bringing power on line, however, has been quite limited. The high quality of our industry's goods and services, our proven track record of reliable power development worldwide, and our superior business and financial know-how appear to be overcoming the unfair advantages our competitors have had. The potential for much more geothermal development in emerging nations is very good. We want to remain poised to take advantage of further opportunities as they arise.

Another important point I want to emphasize today is that *our industry's growth is not limited by geothermal resource availability. Rather, it is limited by inadequate technology.* Only the very highest-grade geothermal resources can be economically used today. Development of the vast majority of geothermal resources is not possible because, at most resource sites, our power-generation costs are higher than those for competing fossil fuels, especially natural gas. Our costs today range from 4 to 7 cents per kilowatt-hour for new power development at high-grade geothermal resource sites, whereas new generation capacity from natural gas, where it is readily available, produces power at 2.5 to 5 cents per kilowatt-hour. Power-generation costs at the much more plentiful lower-grade geothermal resource sites are absolutely unable to compete with natural-gas generation costs in the United States. *A core R&D program aimed at improving existing technology and developing new, advanced technology is critical to help us continue competing in the domestic and global energy marketplaces.* Well-funded R&D programs in Japan and Europe are aimed at advancing their technology beyond our own. The Government of Japan spends about $150 million per year in programs to advance their geothermal technology. Continued and even accelerated efforts to improve U.S. technology are extremely important for the short-range and long-range survival of our industry. For this reason, my association strongly endorses and supports the geothermal R&D program in the Department of Energy.

The member companies of the Geothermal Energy Association respectfully request your Committee to resist cutting DOE's very important geothermal research effort, but instead to continue support during FY 1997 at a level of $38 million. We will match such an amount with a cost share of $50 million from the geothermal industry. Industry's cost share has grown from $20 million in FY 1993 to nearly $50 million in FY 1996. We understand your need to reduce Federal spending to decrease our country's budget deficit, and applaud your efforts to do so. However, we would like to point out that *royalty and lease payments for geothermal-energy production from Federal lands brings about $30 million per year into the U.S. government, essentially paying for the entire Federal geothermal R&D program.* With continued growth, our industry could generate royalties of $100 million per year or more since the majority of the resource occurs on Federal lands. Furthermore, the geothermal R&D budget did *not* participate in the very rapid increase in the overall renewables budget that occurred between FY 1991 and FY 1995. Whereas the overall renewables budget in DOE increased from $201.2 million in FY 1991 to $389.4 million in FY 1995, essentially doubling, the geothermal R&D budget increased only from $29.9 million to $37.2 million (only 24%). If cutbacks were to be uniformly applied across the renewables, the geothermal R&D budget could be devastated and most of the industry cost share lost. We urge you not to let this happen to an industry that is so important to America by clearly stating in legislation your support for geothermal energy development.

TECHNOLOGY NEEDS

During the past two years, the Geothermal Energy Association has conducted a series of workshops to discuss our needs for new technology and to recommend to the DOE cost-shared R&D programs based on our highest-priority needs. We are mindful of the broad nature of the DOE mission to help ensure the energy security of the Unites States. However, we believe that by providing the DOE with an understanding of our needs for technology improvements, their programs can be more tightly focussed on problems that affect our competitiveness in the worldwide energy marketplace. Our workshops have resulted in the recommendation to DOE to concentrate in three program areas -- drilling, exploration and reservoir technology, and energy conversion.

> *Drilling*. Drilling is one of the most expensive activities in geothermal development, but it is necessary to drill production wells to bring geothermal fluid to the surface, and to drill injection wells to return the spent fluid to the reservoir. Because of the high temperatures and corrosive nature of geothermal fluids, geothermal drilling is much more difficult and expensive than conventional oil and gas drilling. Each well costs $1 million to $3 million, and an average geothermal field consists of 20 to 100 or more wells. Drilling costs account for one-third to one-half of the total costs for a geothermal project. Improvement in existing drilling techniques and development of new, advanced drilling techniques would significantly lower the cost of electricity generated from geothermal resources. The GEA estimates that drilling costs can be lowered by 10 - 20% in the short term (the next decade) through incremental improvements to existing technology, and by 30 - 50% through development of advanced techniques such as those proposed in DOE's National Advanced Drilling and Excavation Technologies (NADET) program.
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> *Exploration and Reservoir Technology*. The major problem in exploration is how to remotely detect producing zones deep in the subsurface so that drill holes can be sited and steered to intersect these producing zones. No two geothermal reservoirs are alike, and their permeability (their ability to transmit geothermal fluids to the well bore) varies widely over short distances. Present exploration techniques are not specific enough, and lead us to drill too many dry wells, driving up our development costs. Further, inadequate knowledge of the physical and chemical properties of the subsurface makes it impossible for us to mine the heat in the most efficient way and ensure the sustainability of geothermal reservoirs. We need better geological, geochemical, and geophysical techniques, as well as improved computer methods for modeling heat-extraction strategies from geothermal reservoirs. We believe that geothermal development costs can be lowered by 10 - 20% with improvements in earth science techniques. The DOE is providing funding for joint projects with industry in geothermal fields in California, Oregon, Nevada, Utah, and several other states.
>
> *Energy Conversion*. The efficiency in conversion of geothermal steam into electricity in the power plant directly affects the cost of power generation. During the past decade, the efficiency of dry- and flash-steam geothermal power plants was improved by 25%. Power plants installed at The Geysers geothermal field in California during the 1960s required 20 lbs of steam to produce 1 kilowatt-hour of electricity. The newest plants at The Geysers, installed in the mid and late 1980s, require only 14.5 lbs of steam to produce that same kilowatt-hour of electricity. The GEA believes that geothermal power-plant efficiency can be improved at least 25% more over the next decade with a modest investment in R&D.

In presenting our recommendations to the DOE's Geothermal Division, we have found them to be very interested and helpful in wanting to work jointly with us to improve geothermal technology. In addition, very talented and motivated people, some with decades of geothermal experience, are found in the national laboratories and universities working on the DOE's geothermal program. For these reasons, the GEA strongly endorses the Federal geothermal R&D program.

THE GEYSERS GEOTHERMAL AREA

The Geysers field, located about 80 miles north of San Francisco, CA, is the most productive geothermal field in the world. However, power generation there has been in decline due to dropping reservoir pressure since 1987. Recent joint research work by the industry and the DOE has proven that injection of more water into the reservoir can arrest the pressure decline, and guarantee that the reservoir will produce for many decades more. I am happy to report that construction of the waste sewage pipeline from the Lake County Sanitation District to the southeast part of The Geysers field was undertaken with a ground-breaking ceremony in October, 1995. This pipeline will bring 8 million gallons per day of waste water to the geothermal field to help maintain reservoir pressure and at the same time dispose of the waste water in an environmentally friendly way. We anticipate that the Southeast Geysers Effluent Pipeline Project will increase generation at The Geysers field by 70 megawatts or more. With the successful start of this project, the DOE will initiate a study this year with the City of Santa Rosa, on the west side of The Geysers field, to determine the feasibility of building a pipeline from their waste-water treatment plants to the central part of the geothermal field. Even more waste water will be available from this source for injection in the geothermal field. The GEA is in solid support of these projects, and appreciates the funding made available for them by this Committee over the past several years.

GEOTHERMAL HEAT PUMPS

Geothermal heat pumps are mechanical devices that take advantage of the thermal properties of the earth to provide space conditioning for buildings -- heating in the winter and air conditioning in the summer. The Geothermal Heat Pump Consortium, a group of utilities, equipment manufacturers and HVAC contractors, is moving forward rapidly to advance marketing, training, and demonstration programs. This effort will ultimately lead to the installation of energy-efficient geothermal heat pumps in many more American homes, schools, and other buildings. The potential for savings of electricity and natural gas are large using this equipment, and these savings will be reflected in lower utility bills for rate-payers. The GEA endorses this program, which brings the advantages of geothermal energy to all sections of the United States, and urges this Committee to provide funding for it at the FY 1996 level.

INDUSTRY STATUS

The U.S. geothermal industry is comprised of more than 50, mostly small companies headquartered in various states, including California, Colorado, Florida, Hawaii, Maryland, Nebraska, Nevada, New Jersey, New York, Oregon, Texas, and Utah. Direct employment is about 10,000 people in the U.S., and our indirect effect is a minimum of 20,000 other jobs. We generate a total of 2,280 megawatts of geothermal power, producing 17 billion kilowatt-hours/year, in four states -- California, Hawaii, Nevada, and Utah. States having excellent potential for near-term development of geothermal power include Alaska, Arizona, Idaho, Oregon, New Mexico, and Washington. Geothermal energy is the second largest grid-connected renewable electricity source, after hydropower. We generate 17 times more electricity than solar energy and 7 times more than wind energy. The power we produce in the United States displaces the emissions of 22 million tons of carbon dioxide, 200,000 tons of sulfur dioxide, 80,000 tons of nitrogen oxides, and 110,000 tons of particulate emissions (whose adverse health effects are becoming more widely known) per year compared with the production of the same amount of electricity from an average U.S. coal-fired plant (coal data from DOE/EIA-0348(90)). Geothermal plants in the U.S. and throughout the world continue to function normally, proving the reliability of geothermal power.

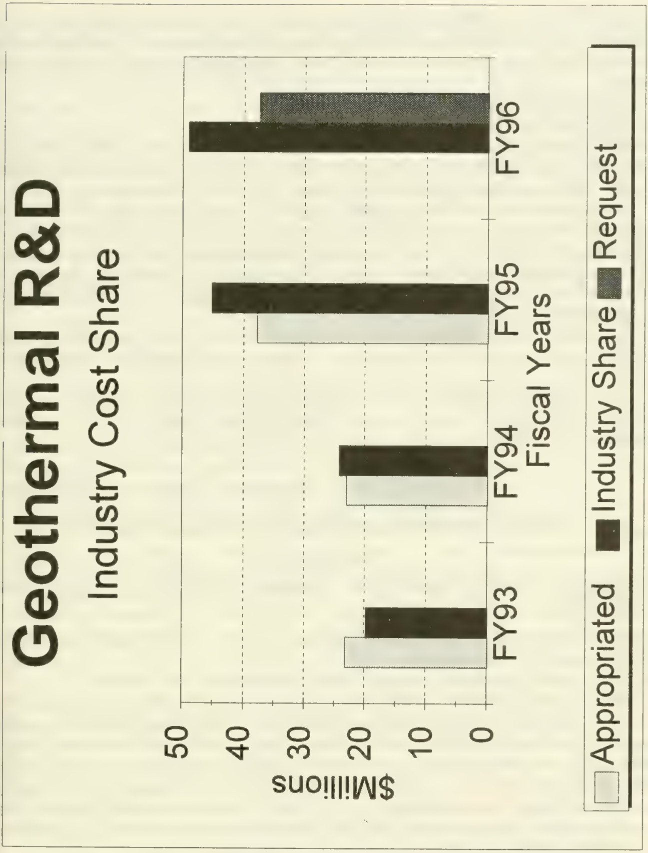
As we all know, significant regulatory changes are underway in the electric utility industry as a result of the Energy Policy Act of 1992 and efforts are continuing on the Federal and state levels to restructure this industry. Utilities and their customers are becoming ever more strongly motivated solely by short-term economics. In addition, natural gas prices have been very low in recent years. Tradition, regulation, and subsidies have favored the use of fossil fuels for electric power generation in our country for decades. Because geothermal energy is not yet at the point of being able to compete in such a biased situation, its many advantages are at risk of being lost. The State of California is among the leaders in utility-industry restructuring, and it's public utility commission is actively working with all concerned sectors to devise a new structure in that state.

All of this adds up to a very troubled, stagnant domestic geothermal market. Our industry has had to curtail activities within U.S. borders and focus its efforts offshore to survive. While foreign development results in expanded export of U.S. goods and services, opportunity to develop domestic geothermal resources is being lost along with its contribution to fuel diversity, energy security, and environmental preservation. It is obvious to us that we must lower the costs of geothermal power production to be able to compete in the domestic market. The only way we see for lowering our costs is with better technology.

COST-BENEFIT OF GEOTHERMAL R&D

Highly successful programs have been and are now being carried out by DOE's Geothermal Division, working with our industry. Partly as a result of Federal investment in research, the cost of generating power from geothermal resources has decreased by about 25% over the past two decades. Federal programs have provided seed money that has spawned much greater investment by our industry on its own. For example, nearly 20 years ago, the DOE invested $10 million to support research on methods to handle the highly saline geothermal brines from the Salton Sea field in the Imperial Valley of California. Brines from this field are 10 times saltier than the ocean, and are highly corrosive. That modest government investment provided the technology base for our industry to develop advanced power-plant designs. When industry-funded prototypes were successful, we went on to provide $700 million of our own money in developing the 240 megawatts of generation in operation today at the Salton Sea field.

The United States is being challenged today on many fronts in the arena of international competitiveness. The time-proven way to address this challenge is with superior technology. Basic and applied R&D are essential to reduce the technical and financial risks of new technology to a level that is acceptable to the private sector and its financial backers. Few emerging, financially marginal industries are able to undertake these costs totally on their own. Our industry is far smaller than the oil, gas, coal or nuclear industries, and has not had the benefit of decades of Federal and private-sector R&D that they have had. With the modest R&D program we propose, the cost of generating electricity from geothermal resources could be lowered by perhaps 40% over the next decade. The R&D projects in DOE's budget will provide a technology base for further investment by the industry of hundreds of millions of additional dollars and result in thousands of megawatts of new environmentally sound geothermal power generation and installation of energy-saving direct heat applications and geothermal heat pumps. These R&D projects, if successful, will have the ultimate effect of bringing 10,000 megawatts more on line in the U.S., and 40,000 megawatts more on line in developing nations in the next two decades.. The value of such development to the U.S. economy would be an estimated $30 billion in direct sales of equipment and services, a target well worth pursuing aggressively.


Geothermal R&D
Industry Cost Share
$Millions
50
40
30
20
10
0
FY93
FY94
FY95
FY96
Fiscal Years
Appropriated
Industry Share
Request

Mr. BEVILL. I would just like to say that I wish that all of the reports that we receive would be as good as yours. I think it is commendable what you are doing with the geothermal source of energy.

Mr. BEMENT. Thank you very much.

Mr. MYERS. Thank you.

Mr. RIGGS. Mr. Chairman, I don't want to detain Dr. Wright. I just want to point out that later today we are going to hear testimony from representatives of Lake County government, which is my congressional district, and I think I can speak for Vic that we are very excited about the ongoing efforts of the Geothermal Association and the fact that we have discovered that this concept of piping treated wastewater up to the geysers, injecting it into the geysers and extending the energy life of the geysers' field has exciting possibilities for all involved.

So, again, we welcome your testimony today and appreciate these efforts; and we will be looking, I hope, for bipartisan support on this bill.

Mr. FAZIO. Absolutely. This project benefits my district as well, because we might have some of that effluent float by us if we didn't reinject it, so we are very happy about the conjunctive use.

THURSDAY, FEBRUARY 29, 1996.

BIOMASS RESEARCH AND DEVELOPMENT

WITNESS

DONALD L. KLASS, PRESIDENT, BIOMASS ENERGY RESEARCH ASSOCIATION

Mr. MYERS. Next is Donald Klass, President of the Biomass Energy Research Association.

Mr. Klass, you may proceed for 5 minutes.

Mr. KLASS. Chairman Myers and members of the subcommittee, all of us in BERA commend you and the committee for your continued support of DOE's biomass research program. Your support is essential to provide the stimulus to help increase commercialization of biomass energy technologies, to help conserve and displace our fossil fuels, to address many of the environmental issues that confront our Nation and to help alleviate the economic problems created because of our dependence on imported oil.

As I stated last year to this subcommittee, biomass energy is the only indigenous renewable energy resource capable of displacing substantial amounts of coal, natural gas and oil, and which alone is responsible for over 40 percent of our trade deficit.

BERA's members recognize the need to restrain Federal spending. Our Board of Directors has accordingly reduced its budgetary recommendations for fiscal year 1997 to the minimum critical amount necessary to sustain a balanced research program.

We urge the committee to sustain biomass research funding in accordance with BERA's recommendations. This will permit DOE to maintain a diversified portfolio of research, rather than to terminate projects that are on the verge of commercialization by the private sector, and to minimize program dismantlement which was started in fiscal year 1996 as a result of program reductions.

Specifically, BERA recommends that $76 million be appropriated for biofuels research and development and industry cost-shared scale-up in fiscal year 1997.

The highlights of BERA's recommendations for fiscal year 1997 are indicated on the bottom of page 1 and on the top of page 2 of our statement. Basically, they include a balanced research program of feedstock production, biochemical and thermochemical conversion and technology transfer to the private sector, with $49 million for research and $27 million for industry cost-shared scale-up projects using best available technologies.

Our recommendations emphasize end uses such as alternative liquid transportation fuels, advanced power generation technologies and innovative municipal solid waste disposal energy recovery systems having superior environmental benefits.

We also recommend that the industry cost-shared biomass production conversion scale-up projects initiated by DOE in fiscal year 1995 and completed in fiscal year 1996 and that are indicated to be both economically and technically feasible be continued in fiscal year 1997. To avoid disproportionate emphasis on single transportation biofuels and termination or reduction of other important program components, we urge that all future fuel ethanol PDU and scale-up activities funded by DOE require at least 50 percent cost-sharing by industry starting no later than fiscal year 1998.

Considerable progress was made by DOE in fiscal year 1995 and 1996 to transfer research results to the private sector by the development of several cooperative research and development agreements, or CRADAs, and the continuation of the scale-up projects.

BERA recommends that at least one new project be selected by DOE for scale-up in fiscal year 1997 from the conversion technology options presented in the last paragraph of page 2 of our statement. Whatever conversion technology is chosen by DOE for processing virgin biomass feedstocks, it should be integrated with a 1,000 acre minimum dedicated biomass feedstock production system that uses the advanced technology already developed in this program.

These projects should be in addition to the medium-Btu gasification project in Hawaii, NREL's fuel ethanol process under development in the PDU in Golden, Colorado, the medium-Btu gasification process for power production in Burlington, Vermont, and the CRADAs between DOE and industry already in progress.

The new projects chosen by DOE from the feasibility studies for continuation can lead to industry cost-shared scale-up in accordance with BERA's recommendations, but we would like to caution that the projects chosen for funding should not be those that are based on technologies which industry has already perfected and commercialized such as medium Btu gas recovery from landfills or those that industry is already funding on its own.

Finally, BERA strongly urges that the majority of Federal appropriations for biofuels research be used to sustain a national science and technology base and biomass via subcontractors outside DOE's national laboratories. While it is desirable for the national laboratories to manage and coordinate DOE-sponsored research activities, support for independent U.S. scientists and engineers and biomass industries that are unable to fund research, academe and research institutes will encourage commercialization of emerging technologies and serious consideration of innovative approaches. It will also help expand the professional development and expertise of a broad and diverse group of researchers committed to the advancement of biomass energy technologies and alternative fuels.

Thank you.

[The statement of Mr. Klass follows:]

Statement of Dr. Donald L. Klass, President
Biomass Energy Research Association
On Department of Energy FY 1997 Budget Appropriation

Submitted to the House Committee on Appropriations
Subcommittee on Energy and Water Development

February 29, 1996

This statement pertains to DOE's appropriation request for Biofuels Energy Systems.

I am Donald Klass, President of the Biomass Energy Research Association (BERA), a non-profit association headquartered in Washington, D.C. BERA was founded in 1982 by biofuels researchers and companies that are conducting biofuels research. Our objectives are to promote education and research on renewable biomass energy and waste-to-energy systems that can be economically utilized by the public, and to serve as a source of information on policies and programs for our members and industry.

First, I would like to thank you, Mr. Chairman, on behalf of BERA's members for the opportunity to present our position on the Federal funding of biomass research. All of us in BERA commend you and the Committee for your continued support of this program. Your support of biomass research is essential to provide the stimulus to help increase commercialization of biomass energy technologies, to help conserve and displace our valuable, depletable fossil fuels, to address many of the environmental issues that confront our Nation, and to help alleviate the economic problems created because of our dependence on imported oil. As I stated last year to this Committee, biomass energy is the only indigenous renewable energy resource capable of displacing substantial amounts of coal, natural gas, and oil, which alone is responsible for over 40% of our trade deficit. And I again emphasize that many energy analysts believe the Third Oil shock is just around the corner because of instability in several oil-producing countries in the Middle East. However, BERA's members recognize the need to restrain Federal spending. Our Board of Directors has accordingly reduced its budgetary recommendations for FY97 to the minimum critical amount necessary to sustain a balanced research program. We urge the Committee to sustain biomass research funding in accordance with BERA's recommendations. This will permit DOE to maintain a diversified portfolio of research rather than to terminate projects that are on the verge of commercialization by the private sector and to minimize program dismantlement, which was started in FY96 as a result of program reductions.

Specifically, BERA recommends that $76 million be appropriated for biofuels research and development, and industry cost-shared scale-up in FY97. The highlights of BERA's recommendations for FY97 are:

- A balanced research program of feedstock production, biochemical and thermochemical conversion, and technology transfer.
- $49 million for research and $27 million for industry cost-shared scale-up projects using best available technology.
- $9 million for industry cost-shared scale-up of integrated biomass production (at least 1,000 acres per site) and conversion.
- $10 million for industry cost-shared scale-up of advanced electric power generation with biomass fuels.
- $6 million for operation of NREL's process development unit for production of fuel ethanol from low-cost cellulosic feedstocks.
- $2 million for industry cost-shared scale-up of advanced municipal solid waste conversion.
- $8 million for technology transfer and commercialization activities managed by DOE's Regional Biomass Energy Program.
- Updating the multiyear program plan for Biofuels Energy Systems.

Regarding specific DOE budget categories, BERA recommends that funding for FY97 be allocated in the following manner:

Office of Energy Efficiency and Renewable Energy		**Recommended Budget**	
	Area	**Research**	**Scale-Up**
Transportation Technologies	Feedstock Development	$ 7,000,000	$ 9,000,000
	Biochemical Conversion	9,000,000	6,000,000
	Thermochemical Conversion	8,000,000	
	Regional Programs	8,000,000	
Utility Technologies	Thermochemical Conversion	13,000,000	
	Systems Development		10,000,000
Industrial Technologies	Municipal Solid Wastes and Chemicals	2,000,000	2,000,000
All Offices	Capital Equipment	2,000,000	
		$49,000,000	$27,000,000
		$76,000,000	

BERA RECOMMENDS $49.0 MILLION FOR RESEARCH AND $27.0 MILLION FOR CONTINUATION OF INDUSTRY COST-SHARED, INTEGRATED, BIOMASS PRODUCTION-CONVERSION PROJECTS FOR FISCAL 1997

A Balanced Program of RD&D and Technology Transfer

Our recommendations comprise a balanced program of feedstock production and conversion research and technology transfer to the private sector with emphasis on end uses such as alternative liquid transportation fuels, advanced power generation technologies, and innovative municipal solid waste disposal-energy recovery systems having superior environmental benefits and minimal emissions. We also recommend that those industry cost-shared, integrated, biomass production-conversion scale-up projects initiated by DOE in FY95 and completed in FY96 and that are indicated to be both economically and technically feasible be continued in FY97. To avoid disproportionate emphasis on a single transportation biofuel and termination or reduction of other important program components, we urge that all future fuel ethanol PDU and scale-up activities funded by DOE require at least 50% cost sharing by industry starting no later than FY98.

Considerable progress was made by DOE in FY95 and FY96 to transfer research results to the private sector by the development of several Cooperative Research and Development Agreements (CRADAs), the continuation of the scale-up gasification projects (Hawaii and Vermont), the dedication of the process development unit (PDU) for fuel ethanol (Golden, Colorado), and the initiation of 11 feasibility study projects to help select new integrated biomass production-conversion technologies for scale-up. We strongly recommend that those projects which these studies indicate are technically and economically feasible be continued with industry cost sharing in FY97. The BERA Board of Directors also recommends that at least one new project be selected by DOE for scale-up in FY97 from the following conversion technology options: Methanol Production by Best Available Thermochemical Technology, Fuel Ethanol Production by Best Available Biochemical Technology, Electric Power Production from High-Efficiency Biomass-Fueled Gas Turbine or Fuel Cell Technology, Municipal Solid Waste Disposal-Energy Recovery by Best Available Technology, Methane Production from Waste Biomass by Best Available Biological Gasification Technology, and Liquid Fuel Production by Best Available Biomass Pyrolysis Technology. **Whatever conversion technology is chosen by DOE for processing virgin biomass feedstocks, it should be integrated with a 1,000-acre-minimum, dedicated biomass feedstock production system that uses the advanced technology already developed in this program.** These projects should be in addition to the medium-Btu gasification project in Hawaii, NREL's fuel ethanol process under development in the PDU in Golden, Colorado, the medium-Btu gasification process for power production in Burlington, Vermont, and the CRADAs between DOE and industry already in progress. A total appropriation of $27,000,000 is recommended by BERA for these scale-up projects as indicated below for the Offices of Transportation, Utility, and Industrial Technologies.

Detailed analysis of DOE's funding request for Biofuels Energy Systems for FY96 shows line items under the Climate Change Action Plan initiatives of $20 million for the 11 feasibility study projects and $9.226 million for commercialization of industry cost-shared, integrated feedstock-power generation systems in the Utility Sector, and $1.9 million for methane recovery from landfills and $1.984 million for advanced turbine systems fueled by biogas in the Industry Sector. These initiatives can lead to industry cost-shared scale-up work in accordance with BERA's recommendations, but we would like to caution that the projects chosen for funding should not be those based on technologies that industry has already perfected and commercialized such as medium-Btu gas recovery and utilization from landfills or those that industry is already funding on its own. Further, we urge that the next phase of the projects selected by DOE management from the 11 feasibility projects completed in FY96 for continuation be funded in FY97.

In addition, BERA strongly urges that the majority of federally funded biofuels research be used to sustain a national science and technology base in biomass via subcontractors outside DOE's national laboratories. While it is desirable for the national laboratories to manage and coordinate DOE-sponsored research activities, support for independent U.S. scientists and engineers in biomass industries that are unable to fund research, academe, and research institutes will encourage commercialization of emerging technologies and serious consideration of innovative approaches. It will also help expand the professional development and expertise of a broad and diverse group of researchers committed to the advancement of biomass energy technology and alternative fuels.

The following represents BERA's specific recommendations on the research areas and funding levels we urge you to include in the FY97 program.

OFFICE OF TRANSPORTATION TECHNOLOGIES

Biomass Production. Land-based biomass grown and harvested specifically for liquid biofuels represents a long-term approach to energy plantations that can supply large amounts of fossil fuel substitutes. Considerable progress has been made on the efficient production of short-rotation woody crops, and on the growth of herbaceous species for energy and fuel applications. In addition, research on tissue culture techniques and the application of genetic engineering methods to low-cost energy crop production have shown promise. This research should be continued as an integral part of the biofuels research program to develop advanced biomass production methods to meet expanding biomass energy utilization in both the transportation and power production sectors. Conventional production methods are insufficient to supply sustainable biomass energy over the long term. BERA recommends that $7,000,000 be directed to continue biomass production research.

Scale-Up. BERA also recommends that industry cost-shared, scale-up projects chosen by DOE of at least 1,000 acres in size be started to initiate development of large-scale, commercial energy plantations in which dedicated energy crops are grown and harvested for use as biomass resources. After the plantations are established, conversion facilities should be added to develop integrated biomass production-conversion systems. These projects should be strategically located and should utilize the advanced biomass production methods developed from the research conducted to date. Successful completion of this work will help biomass energy attain its potential by providing the data and information needed to design, construct, and operate new, multi-quad energy supply systems for both the manufacture of fossil-fuel substitutes and power production. BERA recommends that this scale-up effort be funded at $9,000,000.

Biochemical Conversion. Application of the rapidly advancing field of biotechnology to the conversion of low-cost biomass to liquid fuels such as ethanol has made great progress and should be continued. The successful genetic engineering of the bacteria *Zymomonas mobilis* so that this organism can now ferment xylose to ethanol at the same time as glucose is expected to result in a 10% reduction in the cost of fuel ethanol. Process evaluations by experts have identified key opportunities for early pay-backs with biochemical conversion systems, and new genetic engineering and other emerging biological approaches have made significant advances. Future research should be concentrated on conversion of low-cost feedstocks by high-yield, acid- and enzyme-catalyzed hydrolysis processes, on the development of organisms that can metabolize the hemicellulose components in the feedstocks, and on the utilization of the lignin fractions as octane enhancers and chemicals.

Research is also recommended on the use of genetically engineered bacteria that can produce ethanol from low-cost feedstocks at higher rates and yields and on innovative processes for the production of butyl alcohols from biomass for conversion to methyl-t-butyl ether (MTBE) and ethyl-t-butyl ether (ETBE) gasoline additives.

Considerable progress has been made by U.S. researchers to develop biodiesel fuels from natural triglycerides produced by biochemical processes that occur within biomass. This research should be continued with emphasis on the reduction of biodiesel costs and performance characteristics to satisfy the requirements of the EPA and engine manufacturers.

BERA recommends that $9,000,000 be directed to continue biochemical conversion research for transportation applications.

Scale-Up. BERA recommends that $6,000,000 be directed to operate NREL's PDU for production of fuel ethanol from low-cost cellulosics by the simultaneous saccharification-fermentation process. This plant is being operated with a CRADA partner to obtain scale-up data. Numerous arrangements are in place with various industries and communities across the Nation to develop business plans that can result in widespread use of fuel ethanol-from-low-grade-biomass technology. Successful operation of the PDU will establish the technical feasibility of the process and help to confirm that fuel ethanol can be manufactured from low-cost feedstocks at prices competitive with petroleum-based motor fuels. The capital equipment appropriation of $2,000,000 recommended by BERA should be utilized for PDU modifications if needed.

Thermochemical Conversion. Thermochemical conversion research to produce clean-burning, liquid transportation fuels at competitive costs is the prime target of this program component. Laboratory- and pilot-scale research has established the technical feasibility of several advanced liquefaction processes, and basic research has improved our understanding of the mechanisms of conversion. Direct conversion of wood and herbaceous feedstocks via pyrolysis to liquid fuels and their upgrading by advanced catalytic processes to transportation fuels show promise. Continued research is expected to increase the overall liquid yields to the point where the gasoline costs are competitive with those of petroleum-based fuels. Thermochemical liquefaction of low-grade biomass for the production of low-cost fuel ethanol, mixed alcohols, and ethers for use as fuels and octane enhancement also shows promise and merits investigation. BERA recommends that $8,000,000 be directed to continue thermochemical conversion research for transportation applications.

Regional Biomass Energy Programs. Although the Regional Programs are carried out with a broad spectrum of industry in the transportation fuel, electric power, and other sectors, they were recently transferred to DOE's Office of Transportation Technologies for administrative purposes. The Regional Programs established by Congress in 1983 are implemented through five separate regions located in the Southeast, Northwest, West, Great Lakes, and Northeast. These programs have been important in establishing individual state biomass programs, and in stimulating technology transfer and the development and commercialization of the biomass energy industry in the private sector. The Regional Program activities have created awareness and a positive image for biomass energy while providing significant environmental enhancement and creating new jobs - especially in rural areas. **Regional Program activities are typically highly leveraged with industry adding 2 to 4 times the investment of Federal dollars**. One example is the development and installation of low-cost, anaerobic lagoons for treatment of livestock waste and generation of methane. This technology is usable in hundreds of applications and offers combined energy recovery and waste treatment, while capturing and using methane that would otherwise contribute to global climate change.

BERA is particularly interested in promoting the transfer of commercial and near-commercial biomass technology to the private sector, and feels that DOE needs to place more emphasis on this effort. BERA also believes there should be better cooperation and coordination between DOE's Regional Program and Research Program managers to help achieve this objective.

The five Regional Programs should be maintained to stimulate and assist in the development of the biomass industry. BERA urges that $8,000,000 be provided to continue and expand the work of the Regional Programs.

BERA also recommends that DOE be directed to report back to the Committee within 120 days on efforts to strengthen the coordination between the Regional and Research Program components and to improve technology transfer to the private sector.

OFFICE OF UTILITY TECHNOLOGIES

Electric Power Production. Currently, there are about 8,000 MW of on-line electric power capacity fueled with biomass. Development of advanced gasification processes has significant economic and environmental benefits that could lead to further expansion. Continued research on the thermochemical gasification of biomass has resulted in the development of advanced process designs and reactor configurations that maximize product yields and provide optimum product distributions. This work has been performed at the laboratory and pilot scales. Direct coupling of advanced biomass gasifiers to steam-injected gas turbines (STIGS) and fuel cells should be evaluated as potential, high-efficiency power generation systems. An alternative that should also be evaluated is the integration of high-yield biomass pyrolysis liquefaction processes with power generation either in STIGS or combined-cycle STIGS. Research should also be continued to develop reliable hot-gas clean-up methods that can be used with advanced gasification processes. BERA recommends that $13,000,000 be appropriated for this research.

Systems Development. In addition to power production via medium-Btu gasification in Hawaii and Vermont, at least one new industry, cost-shared demonstration project selected by DOE from those recommended by BERA should be started in FY97. BERA recommends that $10,000,000 be appropriated for these efforts.

OFFICE OF INDUSTRIAL TECHNOLOGIES

Municipal Solid Wastes. In combustion research, a need still exists for improved solid waste combustors that meet environmental requirements and cost goals. Research should be focused on systems that can be used for economic disposal of municipal solid wastes in small communities. Research is also needed to reduce the emissions of solid waste disposal processes and to characterize the specific pollutants produced under specific operating conditions. Other subjects needing additional research are the monitoring and control of combustion effluents, metal behavior in ash, and characterization of changing waste streams. Biological gasification of wastes is unique in that the process can directly produce methane, the major fuel component of natural gas, from the full range of low-cost biomass. Research is needed to develop novel systems that permit higher feedstock concentrations and smaller reactor volumes, and therefore lower capital costs. This research is expected to lead to practical methods for economic production of methane from low-cost biomass. And in the case of feedstocks such as municipal wastewaters, low-cost, integrated biomass production-waste stabilization-methane production systems are expected to evolve from continued research.

Chemicals. A wide range of petrochemical substitutes, such as solvents, adhesives, plastics, packaging materials, and chemicals such as organic acids can be manufactured from biomass residues. Research should be continued to develop advanced processes that utilize both thermochemical and biochemical conversion methods as well as advanced physical separation and processing techniques.

BERA recommends that $2,000,000 be directed to continue research on both municipal solid waste conversion and disposal and chemicals from waste biomass and residues.

Scale-Up. BERA also recommends that one demonstration project should be chosen by DOE from those recommended by BERA and initiated in FY96, and that $2,000,000 be provided to conduct this industry cost-shared work.

ALL ENERGY EFFICIENCY AND RENEWABLE ENERGY OFFICES

Program Planning. DOE's multiyear biofuels program was updated in FY 1993. BERA recommends that the plan be updated at least every two years, and that DOE be directed to supply the Committee with an updated program plan within 120 days.

Mr. RIGGS [presiding]. Let me just ask you, if I might, very quickly, how are you working with the forest products industry, which is a very important industry and employer in my congressional district, to promote the production and use of biomass energy, basically wood waste?

Mr. KLASS. As far as BERA is concerned or as far as the entire program?

Mr. MYERS. Both.

Mr. KLASS. We have a number of programs under way in cooperation with the USDA, and this includes the U.S. Forest Service. Quite a number of Forest Service people are involved in DOE energy projects that are based on biomass feedstocks and the production of biomass, especially because the USDA Forest Service, of course, has a very fine expertise, accumulated over literally dozens and decades of years, in biomass production.

As far as BERA is concerned, we have people from the USDA and from the Forest Service especially, a number of farmers and people who are in the wood-producing area of the business as members of the organization, and they will very cognizant of the possibilities in what is going on now.

For your information, wood fuel biomass energy is over half of the three quad already in place, and I think this is a really a sterling accomplishment over the last couple of years, about the last 20 years, despite the fact that this research has been ongoing since the early 1970s.

Mr. RIGGS. Thank you very much.

THURSDAY, FEBRUARY 29, 1996.

FUSION PROGRAM

WITNESS

DEMETRIUS VENABLE, FUSION ENERGY ADVISORY COMMITTEE

Mr. RIGGS. Mr. Fazio and Mr. Bevill have to go vote. I am going to go vote just as soon as the Chairman returns, but I wanted to defer to Mr.—we are going to, if we can for just a moment, postpone Mr. Croker's testimony—I hope I pronounced his name correctly—and we are going to go to our next scheduled witness, which is Demetrius Venable, representing the Fusion Energy Advisory Committee.

Mr. VENABLE. Thank you, Mr. Chairman and members of the committee. I am Demetrius Venable, a member of the Fusion Energy Advisory Committee. I appreciate the opportunity to appear before you to summarize the views of FEAC concerning fiscal year 1997 appropriations for the fusion program.

I am speaking on behalf of Dr. Robert Conn, Chair of FEAC, and Dr. Michael Knotek, Chair of the FEAC subcommittee that prepared the advisory report on the fusion program. I have provided a copy of FEAC's written statement for your records.

In the conference report for the fiscal year 1996 energy and water development bill, which included a significant reduction in the funding to pursue fusion energy, the conferees directed the fusion energy program to restructure its strategy, content and near-to mid-term objectives, assuming a constant level of effort in the base program over the next several years.

In response, DOE asked FEAC to provide recommendations on how to restructure the fusion program in light of congressional guidance and budget realities.

On January 27, FEAC transmitted to DOE its advisory report entitled, A Restructured Fusion Energy Sciences Program. Copies of this report have been provided for your subcommittee.

In summary, the FEAC report recommends that the mission of the U.S. Fusion Energy Sciences Program be modified to be consistent with both the programmatic guidance and the level of resources provided by Congress. All of the congressional priorities are reflects in FEAC's recommendation.

The underlying theme of the proposed restructuring is to redirect the program away from the expensive, schedule-driven development path for a fusion power plant to the less costly focus on basic science and technology foundations.

The proposed new mission is to advance plasma science, plasma fusion, and fusion technology—the knowledge base needed for an economically and environmentally attractive fusion energy source.

The corresponding policy goals are to advance plasma science in pursuit of national science and technology goals; to develop fusion science, technology and plasma confinement innovations as the central theme of the domestic program; and to pursue fusion energy science and technology as a partner in the international effort.

FEAC examined as its base case a constant level-of-effort budget of $250 million per year. At this level, restructuring begins by providing incremental funding to pursue basic plasma science and fusion science innovations and to achieve greater scientific advances by productive utilization of two of the major tokamak facilities. However, at this level, the tokamak fusion test reactor at Princeton would have to cease operation in fiscal year 1997. The premature shutdown of TFTR would result in the loss of unique scientific opportunities. It is unclear when these lost opportunities would return.

Mr. RIGGS. Sir, if you would withhold for just a moment. Unfortunately, I am going to have to recess the subcommittee momentarily so I can make this vote——

Here comes Chairman Myers now. So we don't have to stand in recess.

Mr. MYERS [presiding]. I apologize for the switch here. Our constituency evaluates us on whether we are there or not, not whether we are here. But this is very important, too, so we appreciate your testimony, and we apologize.

Mr. VENABLE. Below the $250 million level in fiscal year 1997, FEAC concluded that it would be necessary to consult again with our international partners on an affordable U.S. share in the ITER engineering design activities. Moreover, the restructuring transition would be prolonged and complicated and result in a program that is marginalized in the international context.

At the highest budget level considered, $275 million per year, the restructuring would proceed with greater effectiveness by, one, exploiting the high priority scientific results before shutting down TFTR; and, secondly, by strengthening our support for the international commitment of the United States to ITER EDA; and, third, by allowing more vigorous pursuit of the few direction at the core of the restructuring. FEAC recommended this case to the Department.

Through all budget levels, an increase in international cooperation is of paramount importance. FEAC recommends this restructuring to allow focusing on the science and technology foundations for a future push toward fusion energy.

The Fusion Energy Advisory Committee respectfully requests your support for funding the restructured Fusion Energy Sciences Program at the fiscal year 1997 President's budget request. Thank you.

Mr. MYERS. Well, thank you very much for your testimony; and I apologize about the switch here. Your statement will be placed in the record, and we will read it. Thank you very much.

[The statement of Mr. Knotek follows:]

TESTIMONY

OF

DR. MICHAEL L. KNOTEK

PACIFIC NORTHWEST NATIONAL LABORATORY

CHAIR, STRATEGIC PLANNING SUBCOMMITTEE,

FUSION ENERGY ADVISORY COMMITTEE (FEAC)

February 29, 1996

ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE

APPROPRIATIONS COMMITTEE

U.S. HOUSE OF REPRESENTATIVES

Mr. Chairman:

I appreciate the opportunity to appear before you today to provide the views of the Fusion Energy Advisory Committee (FEAC) concerning FY 1997 appropriations for the fusion program. As stated in the letter from the Chair of FEAC transmitting our recent advisory Report to the Director of DOE's Office of Energy Research:

> "This is a time of tremendous progress and opportunity in fusion. Yet, despite significant scientific and technical progress, constrained budget prospects place the United States fusion program at a dramatic crossroads."

In the Conference Report for the FY 1996 Energy and Water Development Bill, which included a significant reduction in the funding to pursue fusion energy, the Conferees directed the fusion energy program "to restructure its strategy, content, and near- to mid-term objectives." The Conferees further stated that "the restructured program should emphasize continued development of fusion science, increased attention to concept improvement and alternative approaches to fusion, and development and testing of low-activation structural materials so important to fusion's attractiveness as an energy source."

The Conferees instructed the Department of Energy, with the participation of the fusion community and the Fusion Energy Advisory Committee (FEAC), to prepare a strategic plan to implement a restructured fusion program, assuming a constant level of effort in the base program over the next several years. On December 5, 1995, the Director of the Office of Energy Research, Department of Energy, requested FEAC to provide recommendations on how to restructure the fusion program in light of congressional guidance and budget realities.

To establish goals, a strategy, and an implementation plan, FEAC created two subcommittees: The Strategic Planning Subcommittee (SPS), specifically charged with developing the deliverables, and the Scientific Issues Subcommittee (SciCom), charged with providing scientific assessments to inform the deliberations. The two subcommittees worked closely throughout the study on the analysis of the key issues. In addition, extensive efforts were made to solicit (including through the Internet) opinions, proposals, facts and positions from the fusion community and interested stakeholders. Over 200 communications were received, and they generated considerable debate. Actions included the following:

- Three open meetings were held, at the Princeton Plasma Physics Laboratory (PPPL), General Atomics in San Diego, and the San Diego International Thermonuclear Experimental Reactor (ITER) Cocenter.

- The chairman of the SPS visited the facilities and held discussions at the Massachusetts Institute of Technology (MIT) Plasma Fusion Center.

- The subcommittees held discussions with the heads of the Japanese, European Union, and Russian fusion efforts, and the head of the ITER design team.

- Several discussions were held with DOE officials and staff, officials from the Office of Science and Technology Policy (OSTP) and the Office of Management and Budget (OMB), and the staff of cognizant congressional committees.

On January 27, 1996, FEAC transmitted to DOE its advisory report, "A Restructured Fusion Energy Sciences Program." Copies of this Report have been provided to this Subcommittee.

In summary, the FEAC Report recommends that the mission of the U.S. Fusion Energy Sciences Program be modified to be consistent with both the most recent programmatic guidance and the level of resources provided by Congress. All the Congressional priorities are reflected in FEAC's recommendations for the restructured program. The underlying theme of the restructuring proposed by FEAC is to redirect the program away from the expensive, schedule-driven development path for a fusion power plant to focus on the less costly critical basic science and technology foundations. The proposed new mission and supporting policy goals are as follows:

> Mission: Advance plasma science, fusion science, and fusion technology -- the knowledge base needed for an economically and environmentally attractive fusion energy source.
>
> Policy Goals:
>
> - Advance plasma science in pursuit of national science and technology goals.
> - Develop fusion science, technology, and plasma confinement innovations as the central theme of the domestic program.
> - Pursue fusion energy science and technology as a partner in the international effort.

As a first step, FEAC recommends the adoption of the mission and goals and renaming the program the Fusion Energy Sciences Program, to reflect accurately its new focus. By incorporating the new mission and goals, the restructured program can fit within a constant annual budget and does not require increased outlays for construction of new facilities.

The FY 1996 budget of $244 million (a 32% reduction compared to FY 1995) forced hard choices and has had serious consequences. Efforts to build a next-generation world class experiment in the United States were abandoned, U.S. participation in the international burning plasma program on ITER was reduced, and other important U.S. fusion science activities were curtailed.

Looking toward the future, FEAC and its subcommittees considered a range of annual program levels in response to Congressional funding guidance. All the funding scenarios require us to close scientifically productive domestic facilities for budgetary, not scientific, reasons, in order to achieve cost-effective utilization of the remaining facilities and to begin the pursuit of new opportunities and directions essential to the restructuring. In particular, FEAC recommended that the Tokamak Fusion Test Reactor (TFTR) at the Princeton Plasma Physics Laboratory should be the first of the three major tokamak test facilities to be retired, but only after a short period of operation to extract the internationally important scientific benefits uniquely available from this facility.

Consistent with the guidance from the FY 1996 Conferees, the FEAC subcommittee examined as its base case a constant level-of-effort budget of $250 million per year (FY 1997 dollars). The restructured Fusion Energy Sciences Program in this case is described in detail in the FEAC Report. This restructured program is consistent with the new mission statement and is built around the three policy goals.

At the $250 million level, restructuring begins by providing incremental funding to pursue basic plasma science, to pursue plasma confinement research (plasma science and alternative concepts), and to achieve greater scientific advances from more productive utilization of the DIII-D and Alcator C-mod tokamak facilities. However, at this funding level, the TFTR would have to cease operation in FY 1997, foregoing the remaining scientific output from that facility. The premature shutdown of TFTR would result in the loss of unique scientific opportunities, and it is unclear when these lost opportunities would return.

Below $250 million in FY 1997, FEAC concluded that it is not possible to implement the goals of the restructured program, which include honoring the international commitment of the United States to the ITER Engineering Design Activities (EDA) and obtaining further valuable scientific benefits from our existing experimental facilities. It would be necessary to consult again with our international partners on an affordable U.S. share in the ITER EDA. Moreover, the restructuring transition would be prolonged and complicated and result in a program that is marginalized in the international context.

At the highest budget level considered ($275 million per year), the restructuring would proceed with greater effectiveness (e.g., exploiting the high priority scientific results before shutting down TFTR; strengthening our support for the international commitment of the United States to the ITER EDA; and allowing more vigorous pursuit of the new directions that are at the core of the restructuring). FEAC recommended this case to the Department. The funding level in FY 1997 is critical, and this level would enable the program to move forward briskly on restructuring while accomplishing the full programmatic scope directed in the FY 1996 Appropriations Report.

In FY 1998 and beyond, stable funding at or above the FY 1996 level of effort would allow the United States to remain abreast of international development across fusion science and technology and to continue world leadership in selected specialties. Such niche leadership is essential for us to be sought by international partners as a valued participant, though perhaps minor monetary contributor, for internationally launched major facilities, defining the path to fusion energy production. At all budget levels, an increase in international cooperation (creation of flexible mechanisms to exploit the capabilities of international facilities jointly) is of paramount importance.

With respect to international cooperation and ITER, the broad physics and engineering challenges that ITER addresses are largely generic to any next step toward the goal of fusion energy. Therefore, the science and technology research within both the ITER EDA and the U.S. core program that addresses ITER's challenges is appropriate and valuable. Such work is also consistent with the recommended fusion energy science mission of the program. FEAC finds that the most cost-effective way for the United States to maintain a strong research effort in burning - plasma physics is through continued participation in the ITER EDA and the ITER process. Furthermore, the ITER EDA will provide a robust and thorough engineering design based on extensive R&D activities. This design has already highlighted certain significant physics issues and has become a driver in current experimental and theoretical programs. In addition, ITER is the single most important mechanism for American industry to participate in fusion development.

Critical to the success of the restructured program is immediately starting a governance transition, as a mechanism for guiding and implementing the major programmatic changes in a smooth and effective manner.

- The Fusion Energy Sciences Advisory Committee to DOE's Office of Energy Research, assisted by a continuing Science Subcommittee, should advise the Director of the Office of Energy Research and the program office on policy, goals, priorities, budget, direction, program balance, and governance.

- Fusion Energy Sciences Program Management must be reorganized and downsized to match the science-dominated mission and rely significantly on peer review as the primary input for funding allocations.

Specific programmatic reviews should be conducted and integrated during the remainder of FY 1996 to help set the technical priorities of the restructured program, given a funding level not to exceed the FY 1997 President's Budget Request.

- A Major Facilities Review in association with a User Access Working Group

- An Alternative Concepts Review

- Planning for review of the ITER EDA and its results and to establish criteria for a decision on future U.S. participation.

The current federal budget realities and the lack of a perceived domestic energy shortage demand program restructuring in accordance with the recommendations in the FEAC report, so that the U.S. program will focus on the science and technology foundations for a future or internationally led push toward fusion energy. United States involvement in fusion research and development will continue to be "a valuable investment in the energy future of this country and the world, as well as sustaining a field of scientific research - - plasma physics - - that is important in its own right and has been highly productive of insights and techniques applicable in other fields of science and industry."[1] Enhanced public outreach is needed to keep the public, stakeholder groups, and the broader scientific community fully informed.

The historically strong United States leadership role in the world fusion energy program came to an end with the decision on FY 1996 funding. However, FEAC concluded that the United States can still play an important supporting role in magnetic fusion energy development, but only by recognizing the new dependence of U.S. efforts on the activities and decisions of Europe, Japan, and the Russian Federation. As such, progress will depend on maintaining a balance of domestic and international activities.

In conclusion, the United States fusion program is indeed at a dramatic crossroads, and FEAC believes that the United States must field a program that seizes the opportunities of today, in a restructured format, to promote progress in fusion science and technology. The restructured program recommended by FEAC is very responsive to the programmatic and funding guidance provided by the FY 1996 Appropriations Conferees. The Fusion Energy Advisory Committee respectfully and urgently requests your support for funding the restructured Fusion Energy Sciences Program at the FY 1997 President's Budget Request.

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[1] *The U.S. Program of Fusion Energy Research and Development*, Report of the Fusion Review Panel, President's Committee of Advisors on Science and Technology (PCAST), July 1995

THURSDAY, FEBRUARY 29, 1996.

UNIVERSITY RESEARCH REACTOR PROGRAM

WITNESS

NEIL E. TODREAS, KEPCO PROFESSOR OF NUCLEAR ENGINEERING, MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Mr. MYERS. Next is Neal Todreas, Professor of Nuclear Engineering at MIT.

Mr. TODREAS. Good morning, Mr. Chairman.

Mr. MYERS. Your prepared statement will be placed in the record and you may proceed for five minutes as you would like. Thank you.

Mr. TODREAS. I am impressed that a lot of the witnesses before the committee are people who have been here before. As for myself, I am a new face with a familiar subject with a new twist. I am talking about university research reactors. I am not a university researcher on reactors myself, and for that reason, I was chosen recently to lead a review of the research reactor at MIT by conducting a review for the administration with an outside committee, with professors from outside the Nuclear Engineering Department. In doing that, I became interested in the potential, the possibilities, and the problems, and then got involved on a national level in this area.

In terms of a new face, although I haven't appeared before you, both my sons have been staffers, but on the other side of the Capitol, and I don't know if the style here that I will present will fit on this side, but we will see.

Mr. MYERS. We go over there once in a while and do missionary work.

Mr. TODREAS. In terms of the familiar subject, the value of university research reactors has been continuously supported by appropriations and been presented before this committee, most recently $2.7 million in fiscal year 1996. There are 34 reactors in 25 States. The DOE commissioned a report in May, sent out by the Secretary, and there have been a number of other studies made, most recently one by the National Research Council.

The principal findings of the May 1994 report were that DOE considers university reactors to be an important national asset to nuclear science, technology and manpower development. Total costs of these reactors are equivalent to operating one DOE research reactor. The 37 research reactors considered in the then-study, although there are only 34 operating now, represented an initial investment of $60 million and a replacement value today of about $1 billion.

The twist, or the new step on this, is the need to focus on a regional basis a program on five to seven centers, each based on a university reactor to enhance their productivity relative to the scientific excellence of proposed activities with a peer review selection. The concept is proposed now for two principal reasons; this is a very important point:

First, there is a national evaluation going on now on neutron research facilities, stimulated by the fact that the advanced neutron source won't be built, and the focus within DOE is how to take their resources and fill that gap. With that national program going on, the contribution of university reactors should be considered and made part of that activity.

Second, the issue is coming up because university reactors are nearing the end of their 40-year lifetime, and as they end the year, that activity, the administrators at universities are trying to decide whether to relicense them and reinvest in them, so it is a critical time for that.

The program financial requirements are $8 million to $10 million in sustaining operating funds, and $5 million over five years for capital funds.

Behind this proposal is a university community—the names of the people are listed in the prepared statement—and an industrial group.

Finally, I ask that the committee direct DOE to consider the benefits of this proposal to the national needs, and then to have DOE inform Congress of the technical basis for their decision. This is being evaluated by them at this time. Thank you.

Mr. MYERS. Well, thank you very much for your testimony, and tell your sons you done good.

[The statement of Mr. Todreas follows:]

rev. 2/27/96

Prepared Statement of Professor Neil E. Todreas, for the Energy and Water Development Subcommittee on Appropriations, Mr. John Myers, Chairman, in Support of Oral Testimony at Hearing of February 29, 1996

PROPOSAL FOR FY97 BUDGET OF THE DEPARTMENT OF ENERGY

UNIVERSITY RESEARCH REACTOR CENTERS OF EXCELLENCE

(Short Statement of Objectives)

WHAT IS THE GOAL OF THIS PROPOSAL?

To establish a DOE-funded program for five to seven regional university centers for radiation science and technology education, each based around a university research reactor.

WHAT BENEFITS WILL RESULT FROM IMPLEMENTATION OF THIS PROPOSAL?

The URR Centers of Excellence will develop and operate programs of excellence in research and teaching focused on the applications of research reactors in the neutron sciences and technologies. This will allow existing investments in the URRs to be leveraged significantly to benefit the national needs for research and teaching in the neutron sciences and technologies.

WHAT ARE THE RESEARCH AND EDUCATION BENEFITS AS WELL AS THE POTENTIAL ACCOMPLISHMENTS TO BE UNIQUELY DERIVED FROM URRs?

The URRs can make a major impact on research and development in the neutron sciences and technologies, and also provide optimal facilities for the education of future scientists and engineers who are critical to sustaining the nation's technological base in a diverse spectrum of fields. Work at existing URRs is responsible for developing new radiopharmaceuticals for diagnosis and treatment of cancers, for providing structural information on new high-technology materials, for developing critical data on the behavior of metals, ceramics, polymers, and reactor coolants in radiation environments, and for providing critical data from neutron activation analysis to make advances in a variety of diverse fields (e.g., allowing archaeologists to map trade routes of prehistoric artifacts). Most of these areas of technology are uniquely in the domain of nuclear research reactors and cannot be duplicated on accelerator-based radiation sources. The facilities existing or that can be developed at URRs for the study of materials, trace element analysis, and for producing isotopes are complementary to those found at the National Laboratories, but are located in the highly creative and multidisciplinary environment of a university. In their role of providing graduate education and training for radiation scientists, URRs exploit these benefits of the university and provide educational advantages that are generally superior to those afforded by the national user facilities. This is the concept for "feeder research reactors" that has been highly successful in Europe and has been an important factor in propelling these countries into their present dominant leadership roles in the neutron sciences. With adequate support of URRs, this model can also be implemented here and help ensure that the U.S. will fully benefit from the neutron sicences and technologies.

WHAT ARE THE PROGRAM FINANCIAL REQUIREMENTS?

$8-to-10M annually in sustaining programmatic funding. These are new dollars beyond the historically provided and proposed funds for the entire university reactor population (see attachment).

$25M initial (likely adequate for first 5-year period of Center program) for capital funding for preparing reactors for regional Center role (e.g., power upgrade, instrumentation, facility refurbishment).

HOW DOES THIS INITIATIVE RELATE TO EXISTING FEDERAL SUPPORT FOR URRs?

This proposal is for new funds to enhance the research and education productivity of five-to-seven of the existing 34 URRs. The remaining URRs will continue to provide nationally important facilities for training and introduction of the public to radiation sources and applications. Therefore, the existing funding for URRs for reactor fuel, access of regional institutions to these facilities (i.e., reactor sharing), and instrumentation is also needed. Historically this need, while acknowledged by existing DOE financial support, has been underfunded.

ARE THERE PREVIOUS SIGNIFICANT REPORTS ON THIS NEED?

Secretary O'Leary submitted a May 19, 1994 Report to Congress as required by the Energy Policy Act of 1992, based on data gathered in early 1993. The principal findings were:

- DOE considers university research reactors (URRs) to be an important national asset relative to nuclear science, technology, and manpower development.
- The total operating costs of all URRs are equivalent to the cost of operating one DOE research reactor.
- The 37 URRs considered in the study represent an initial investment of $60M with a replacement costs of about $1B today.
- Needs for upgrades identified in $M were:

Power Range	Reactors	Operations	Utilization
Less than 1 MW	20	3.9	1.6
1 MW to 2 MW	13	5.3	7.9
Over 2 MW	3	5.5	56.2
	36*	$14.7M	$65.7M

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* Currently there are 34 operating URRs.

The most comprehensive prior study was that by the National Research Council (NRC) in 1988, which concluded that the URRs serve the national interest in research, education and service. This study, which references other related studies, also concluded that these research reactors do not adequately fulfill the national interests in research and education related to the neutron sciences and technologies. These shortcomings are particularly apparent when comparing the U.S. to the foreign situation, especially in Europe and Japan. These deficiencies stem in part from inadequacies in financial support for operating, upgrading and state-of-the-art research instrumentation.

WHY IS THIS INITIATIVE NEEDED NOW?

URRs constructed in the late 1950s and early 1960s and granted 40-year operating licenses are facing the decision of whether to relicense. University administrators who have been funding research reactor operations from university sources are increasingly reluctant to make the long term commitment to continue this support which a positive decision on license renewal entails because of the decreasing level of nuclear energy technology activity nationally. Concurrently, Nuclear Engineering Departments are increasing their emphasis on radiation science to stay viable, and their research reactors are thus becoming increasing vital facilities for anchoring their experimental research activity in nuclear science and engineering.

The closure of one or more flagship university reactors would trigger a re-evaluation of the commitment of many of the smaller reactors to stay operating. This could result in the loss nationally of significant capability for radiation science and engineering education.

HOW MUCH CONSENSUS EXISTS FOR THIS PROPOSAL?

This proposal was accelerated in the fall of 1995 by an industrial group gathered by MIT's president following a review of operations and relicensing potential for the MIT research reactor. This industrial group solicited the views of the URR community through the National Organization of Test, Research and Training Reactors.

The industrial group strongly favors this proposal as the vehicle to develop research of national scientific and technological benefit while simultaneously securing vital facilities for the training of students in the radiation sciences and applications. The university community is currently reviewing this proposal. The facilities that are heavily research oriented will generally endorse this proposal on the basis that a peer-reviewed center selection process is adopted and the need for funding for the non-center URRs is affirmed. The facilities that do not consider themselves candidates for center designation will likely not endorse this proposal believing that this proposal will capture a disproportional amount of the funds that will be made available to the entire URR community.

WHAT IS THE SCOPE OF THE CENTER PROPOSAL?

Several URR Centers of Excellence will be provided with resources needed to develop and operate world-class programs in research and teaching focused on the applications of research reactor in the neutron sciences and technologies. Financial support for reactor-based research and reactor operations will be made available to a total of five-to-seven URR Centers of Excellence. Total funds of $8-to-10M will be available for this aspect of the program. Funds will also be available for reactor and major experimental equipment upgrades which will be needed to assure that the centers can effectively carry out their missions. A total of $25M for these capital improvements will be available to the centers over a period of three-to-five years. Funding under this program will be provided on the basis of detailed proposals which will be submitted to rigorous peer review.

It is important that the funds for this Center concept be in addition to those historically and currently projected for the URR community. These funds (see attachment for history of URR support) are needed for those in the existing community of 34 URRs that will not benefit from the Center concept for reactor fuel, reactor sharing (with their regional institutions), and instrumentation. A budget of $5-8M/yr is needed for this community for operations and capital to support safe, efficient operations.

WHAT ARE THE ELEMENTS/PRINCIPLES OF THE CENTER CONCEPT?

- Five-to-seven sites;
- $8-to-10M/yr sustaining programmatic funds and $25M capital improvement funds (these should be new funds) to be funded over a two-to-three year period;
- University reactors that do not successfully compete should receive reactor funding from existing University Research Reactor programs, which can conceivably achieve a $8M/yr level over the next several years;
- Center support shall be awarded for a five-year period renewable subject to rebidding in a new competition; and
- A set of selection criteria for proposed Centers will be established, which will include:
  - the existing and proposed strength and breadth of the research programs and research equipment using the reactor,
  - the existing and proposed institutional support structure for research and education in the radiation sciences including the level of external grant support already in place, and
  - the cost-effectiveness of the research performance of the reactor.

WHICH GROUPS ARE SPONSORING THIS PROPOSAL?

This preliminary statement of the Center of Excellence concept is being developed into a final proposal with the encouragement and assistance of the following people:

University Community

Prof. Neil Todreas, MIT, Chairman, Reactor Review Group
Dr. Richard Holm, Executive Committee, TRTR*; Director, U.Ill. Research Reactor
Dr. James Rhyne, Director, U.Missouri, Research Reactor Center
Dr. David Shirley, PennState, Sr. VP, Research & Graduate Education; Chairman, NAS 1988 URR Study
Prof. Marcus Voth, Chairman, University Reactor Support Committee, TRTR; Director, PennState Radiation Science & Engineering Center
Prof. Bernard Wehring, Co-Chairman, TRTR; Director, Nuclear Engineering Teaching Lab, U.TX-Austin

* National Organization of Test, Research & Training Reactors

Industrial Advisory Group

Mr. John Landis, Chairman of Advisory Group; retired Executive VP, Stone & Webster Engineering Corp.
Dr. E. Linn Draper, Member, Executive Committee, Board, NEI; President & COO, American Electric Power Co.
Dr. Robin Jones, VP Nuclear Power, Electric Power Research Institute
Mr. William Lee, retired Chairman & President, Duke Power Co.
Dr. Lawrence T. Papay, MIT; VP and Manager, R&D, Bechtel Corp.
Mr. Cordell Reed, VP, Commonwealth Edison Co.
Dr. Steve Specker, VP Nuclear, General Electric Co.
Dr. Bertram Wolfe, retired VP Nuclear, General Electric Co.
Mr. Nathaniel Woodson, VP, Westinghouse Electric Corp.

For Further Information, contact:

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email: todreas@mit.edu

RESEARCH REACTORS AT U.S. UNIVERSITIES

(updated from 1988 National Research Council Study)

Owner	Designation	Power (Megawatts)	Notes
Missouri, University of (Columbia)	MURR	10	
Georgia Institute of Technology	GTRR	5	
Massachusetts Institute of Technology	MITR-II	4.9	
Michigan, University of	FNR	2	
Rhode Island Nuclear Science Center[a]	RINSC	2	
New York, State University at Buffalo	SUNY	2	Presently closed
Virginia, University of	UVAR	2	
Illinois, University of	UI-TRIGA	1.5	
Lowell, University of	ULR	1	
North Carolina State University	PULSTAR	1	
Oregon State University	OSTR	1	
Pennsylvania State University	PSBR	1	
Texas A&M University	NSCR	1	
Texas, University of (Austin)	UT-TRIGA	1	
Washington State University	WSUR	1	
Wisconsin, University of	UWNR	1	
		(Kilowatts)	
California, University of (Irvine)	UCI-TRIGA	250	
Kansas State University	KSU-TRIGA	250	
Maryland, University of	MUTR	250	
Michigan State University	MiSU-TRIGA	250	Presently closed
Reed College	RRF	250	
Missouri, University of (Rolla)	UMRR	200	
Arizona, University of	UA-TRIGA	100	
Cornell University	Cor U-TRIGA	100	
Florida, University of	UFTR	100	
Utah, University of	Utah-TRIGA	100	
Washington, University of	UWNR	100	Presently closed
Iowa State University	ISU	10	
Worcester Polytechnic Institute	WPI	10	
Ohio State University	OSURR	10	Now 500 kW
Purdue University	PUR-1	1	
		(Watts)	
Cornell University	ZPR	100	
Oklahoma, University of	AGN-211P	15	Presently closed
Idaho State University	AGN-201M	5	
New Mexico, University of	AGN-201M	5	
Texas A&M University	AGN-201M	5	
Utah, University of	AGN-201	5	Presently closed
Illinois, University of	UI-LOPRA	1	Presently closed
Manhattan College	MCZPR	0.1	
Rensselaer Polytechnic Institute	RPI	Critical	

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[a] State operated

SOURCE: Burn, 1983, 1987.

THURSDAY, FEBRUARY 29, 1996.

PHOTOVOLTAICS

WITNESSES

HON. MICHAEL N. CASTLE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF DELAWARE

ALLEN M. BARNETT, PRESIDENT, ASTRO POWER

Mr. MYERS. Next, our colleague, Michael Castle, from Delaware. Your prepared statement will be placed in the record, if you would like to proceed for the next five minutes.

Mr. CASTLE. I will just take a moment to introduce somebody who probably needs no introduction to you, Mr. Chairman. Some of you may remember Dr. Barnett. I am not going to go through his whole resume, but he has a very distinguished resume as a Ph.D. and has actually been involved with a photovoltaic science research longer than most of us have been in politics, if that is believable.

But he has a tremendously positive story here today. He has one line in his testimony that I think you will enjoy a great deal—I will let him deliver that surprise—about less Federal dollars going into something, and if all goes well, he will hire as many people in Delaware in the next two years as the DuPont Company just laid off, I might say.

So with that, let me turn this over to somebody who has become, I think, a friend of this subcommittee, Dr. Allen Barnett.

Mr. MYERS. We will be pleased to hear from you.

Mr. BARNETT. Thank you, Mr. Chairman and Members of the Subcommittee.

We are one of the fastest growing photovoltaic companies in the world. We grew 60 percent in shipments last year, and are growing at the rate of 350 percent a year. We are the second largest U.S.-owned, we are the seventh largest in the world, and we are the largest independent, thanks to good use of—shepherding of public money and private money.

The public wants solar electricity. There are two problems:

Cost, and there is no way for a consumer to buy one, a household who wants to buy one; it can't be done. It is very hard to do. I am going to give you a cost example and then I am going to give you an example about how to buy one.

But costs have been going down recently. In fact, the industry went from a four-inch solar cell to a five-inch solar cell; that dropped the cost by 10 percent. We have just introduced a six-inch solar cell, another 10 percent. Standing behind that is another one, 10 percent more. Keep adding it up, and we have to get down to three——

Mr. MYERS. Go up to about five feet and save all the money.

Mr. BARNETT. Two feet, you are right on, Congressman Myers. If you add all of that up, you want to get down to $3 a watt, you will be competitive with utility-generated electricity. To do that, actually the number is two feet, and the prototype is here. It was paid for by the Department of Energy Photovoltaic Manufacturing Technology program. Without that program, the six, the seven, the two-footer wouldn't exist.

I think all of the U.S. industry would say that that particular program has led to our industry now being the largest player in the world. U.S. industry now dominates; U.S. industry is fastest growing. We are growing faster than the market is growing. That is because one single Department of Energy program triggered it.

In our case, we cost-share two-to-one. For every dollar we get of DOE dollars, we put in $2.

The other thing we have to solve is making it easy for people to buy it. People call their utility and say, I want to buy one, and the easy answer from the utility is no. Well, there is a program now called PV-Compact that is helping utilities buy it; and it is not really buying down, it is encouraging them. For every dollar the government puts in to pay a utility, they put in $4 to $8 of their own dollars, very leveraging. It is going to get to the point where people can buy them. That will, A, strengthen our industry and, B, lead to long-term dominance by U.S. industry.

Finally, the two provisions:

Sunset. From AstroPower's point of view, we need four more years of this kind of support, at which point we will be independent of government support and we will be able to pay for the product with our own earnings.

We still will need parity with other governments. If another government is trying to buy our market share by direct support of their industry, we still should be watching that, but we won't need it for product development.

Finally, payback. This year AstroPower will pay taxes equal to 38 percent of what we get from the PV program. In four years, we estimate that number to be 360 percent of what we get.

We think the Federal dollars are most leveraging to companies like us. I wouldn't be here without the Federal dollars. We think the return on investment for government dollars is excellent, and I would be pleased to provide any additional information to this committee, either now or at a later date.

Thank you.

Mr. MYERS. Well, thank you very much for your testimony, Mr. Barnett, again.

This committee has always supported solar; the only problem is getting a panel some place. Which State are we going to cover up to provide all of that electricity? I am sure Delaware is not ready to make its contribution, but that has been the problem up until now. If you can get more efficiency out of that panel which you are heading towards now, that is the direction we all hope to get.

Mr. BARNETT. I think we can actually do all of our future electricity needs on rooftops, so we don't have to cover any State, but we will keep the present generating systems in place.

Mr. MYERS. Well, thank you. Thank you, Mike, for your testimony.

[The statement of Mr. Barnett follows:]

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Photovoltaic Solar Energy

Testimony

Energy and Water Development
Subcommittee on Appropriations
United States House of Representatives

by

Allen M. Barnett, President
AstroPower, Inc.
&
President
Solar Energy Industries Association
February 29, 1996

AstroPower designs, develops, and manufactures photovoltaic solar cells for the direct conversion of sunlight to electricity. AstroPower is one of the fastest growing photovoltaic solar cell manufacturers in the world. Our solar cell and module shipment growth was 60% in 1995. Growth of 120% is projected for 1996 for a total of 5.5 megawatts – enough for 3,000 homes.

We employ 143 people in the State of Delaware and plan to add 140 new jobs over the next two years. All of our major suppliers are in the United States. We also sell a lot of product through distribution channels, leading to more jobs in the distribution, development and assembly of solar electric systems.

The public wants solar electricity. The Department of Energy programs have made a difference towards making solar energy affordable and helping the U.S. industry become leaders. There are two issues:

1. Reducing the costs
2. Integrating the product into the delivery system.

Following is a cost reduction example.

AstroPower manufactures crystalline silicon solar cells which have demonstrated the high performance, efficiency, and reliability required to serve power generation markets. The remaining obstacle is cost. The cost reductions required to enter the utility power market can be achieved with AstroPower's proprietary Silicon-Film™ products. The Silicon-Film™ process leads to a high performance, low-cost solar cell for terrestrial power applications. The specific technical approach involves growing a thin polycrystalline silicon layer on a low-cost substrate.

AstroPower received its first small contract for the development of the Silicon-Film™ Process in June 1987. This led to the first laboratory-size Silicon-Film™ solar cells with efficiencies over 10% in that same year. Those results were followed by laboratory efficiencies of 15.7% in 1988 and commercial-size prototypes in 1989. With support from the cost-shared PVMaT program, pilot-scale manufacturing equipment began operation in 1991 and commercial-grade solar cells were fabricated in 1992.

The Silicon-Film™ process is uniquely capable of producing larger, more powerful solar cells such as the AP-225. The AP-225 is twice the size and generates twice the power of standard size silicon solar cells. The benefits of this larger product include a more efficient use of capital equipment and labor which results in a lower cost per watt of power. This new solar cell is presently in production. This solar cell was conceived and manufactured under PVMaT. ***It is a PVMaT product.*** It was demonstrated as an emerging technology under the Photovoltaics for Utility Scale Applications (PVUSA) program in November 1994. This product received a R&D 100 Award in 1995 as one of the 100 most technologically significant new products of the year.

This first ***PVMaT product*** is leading to a succession of larger and lower cost solar cells.

U.S. utilities are the ideal delivery mechanism for the U.S. consumer. Government support can be very leveraging. Following is an example.

> PV-Compact, a unique collaborative comprised of the solar industry, state consumer advocates, state utility regulators and electric utilities, has been designed to close a massive gap in electric utility understanding and acceptance of PV and to standardize its use. Over 90 electric utilities have pledged up to $368 million in a 70%, five-year cost-share with the federal government to integrate PV into the utility sector, thus creating the next generation of US-based PV manufacturing. The federal contribution buys down the regulatory risk needed by utilities to receive approval to integrate new technology on the electric grid. ***This program is based on the premise that for any industry to maintain global dominance, it must have a growing domestic market.***

These programs have made and continue to make a difference. It is too early to relax and declare a victory, however. We must strengthen the manufacturing capability in the United States. The Japanese Government has openly stated that development of thin silicon solar cells (similar to AstroPower's) is their highest priority in photovoltaics. The New Energy Development Organization (NEDO) of the Ministry of International Trade and Industry (MITI) has been funding several companies to develop thin silicon technology. One company is receiving $2.2 million/year to "reproduce AstroPower's results."

It is vital that we continue to manufacture these solar cell products with the high performance, high quality, and low costs required to successfully compete world-wide. Assistance from the Department of Energy programs has put us on the threshold of explosive growth. Continuation of the present programs is required to achieve the goal of a healthy photovoltaic industry in the United States.

Every Government dollar has attracted almost $2 in private sector money. The total cost to reach this level has been $34 million with 37% borne by the U.S. Department of Energy initially through Sandia National Laboratories and presently through the Photovoltaic Manufacturing Technology program (PVMaT) by the National Renewable Energy Laboratory.

Silicon-Film™ solar cells can help manage electricity demand and are pollution-free. U.S. developed technology should be combined with modern manufacturing techniques to keep this and other photovoltaic energy technologies in the U.S. Support from Congress has brought this technology to the threshold of making a significant contribution. Continued support over the next four years can launch this important technology and lead to a profitable domestic photovoltaic industry, which will create many new jobs from manufacturing through installation and operation. This new photovoltaic industry will have a long-term impact on energy self-sufficiency. The technology and brain-power are available in the USA to complete the development of this important solar electricity technology and make a difference for the future electricity supply and the growth of a new business sector.

Sunset - AstroPower needs 4 more years to be independent of Federal support of research and technology development. We will be able to pay 100% of our R&D from earnings in four years, not just 63%.

After this four year period, we will still need parity with the programs of other governments, some of whom are actively supporting and developing their industry with the intent to export -- in some cases to the United States.

Payback - AstroPower's present tax payments equal 38% of our DOE photovoltaic contracts. AstroPower estimates that tax payments will equal 360% of present PV contracts in 4 years. There would be no deficit if all Federal programs had a similar payback.

In conclusion, the Federal dollars are very leveraging to companies like AstroPower. The return on these Federal dollars is excellent.

Please let me know if I can provide any additional information to the Committee or the staff either now or at a later date.

THURSDAY, FEBRUARY 29, 1996.

EXPERIMENTAL PROGRAM TO STIMULATE COOPERATIVE RESEARCH

WITNESS

G. WILLIAM CROKER, UNIVERSITY OF ALABAMA, COALITION OF EPSCoR STATES

Mr. BEVILL. Thank you, Mr. Chairman. I am delighted to have my good friend, Bill Croker, here, who is Assistant to the President of the University of Alabama at Birmingham. Bill is 18 years with that great institution, and he is getting what we call seniority now, so we appreciate him.

And Bill, glad to have you with us again, and we will be glad to hear from you.

Mr. CROKER. Thank you very much, Mr. Bevill, Mr. Chairman, members of the committee. It is an honor to be here today to testify on behalf of the Coalition of EPSCoR States in support of the DOE EPSCoR program. It is also a somewhat melancholy occasion in that the dean of our delegation, Mr. Bevill, and your Ranking Minority Member, has decided to retire from the Congress at the end of this session. This is surely a great loss for Alabama and the Nation; and it is not such a great day for Bill Croker either, I can tell you.

In any event, we would be remiss if we did not use this, perhaps our last opportunity to testify before Mr. Bevill, to just thank you for all of your great efforts on behalf of the State of Alabama and, in particular, the University of Alabama system. If I were just to list what you have done, it would take all of my five minutes, so let me simply say, thank you so much.

I would like to include in my statement a letter from Chancellor Philip Austin of the University of Alabama system, explaining these same sentiments.

Mr. MYERS. Without objection, it will be included.

Mr. CROKER. I also would like to note, Mr. Chairman, that you and your colleague, Mr. Bevill, have formed a truly effective bipartisan leadership team to build this country and to make it a more productive and better place in which to live.

In my view, when you talk about leadership, the DOE EPSCoR program is a very good example. When we in that Coalition of EPSCoR States decided that the model developed at NSF was appropriate for use at other science agencies, this subcommittee was the one that stepped up and first took the action to extend it; and it is now your leadership that has been followed by your colleagues in the Department of Defense, NASA, EPA and others.

In 1992, the Congress saw the wisdom of the subcommittee's action in the Energy Policy Act and included a specific authorization for the DOE EPSCoR program. Since that time, the subcommittee has continued to fund the program, most recently at $7 million.

We do not know as yet what the administration may propose for DOE EPSCoR in the next—for the next year, but we hope that once the budget becomes available, the committee will examine it closely and provide funding to support a vibrant EPSCoR program in all eligible States.

In Alabama, the EPSCoR program has really worked as intended. This is a success story right across the board. We have competitively reviewed energy research programs under way now in petroleum reservoir characterization, fusion energy research, and novel organic semiconducting materials. But it is really—in a State like Alabama, where we fight among ourselves occasionally, it has brought the universities together; and we are also supporting the development of our historically black universities. Tuskegee University has just joined the EPSCoR group in Alabama.

Not only are we doing the research, but we are developing our faculty at the professional and graduate level. We are extending our efforts to improve energy science, awareness at all levels: high school, high school teachers.

The major focus I want to emphasize is making us more competitive for DOE research, and that is our primary objective, but it is also extending awareness and interest in energy research across the board through our State.

I appreciate your time and urge your continued support for this important program.

Mr. BEVILL. Thank you. Thank you very much, Bill.

Mr. MYERS. Thank you. You are from the University of Alabama, you are not changing that name, but are you from the Bevill campus?

Mr. CROKER. No, but maybe in the future.

[The statement of Mr. Croker follows:]

WRITTEN TESTIMONY
SUBMITTED BY
MR. G. WILLIAM CROKER

ASSISTANT TO THE PRESIDENT AND
DIRECTOR OF GOVERNMENTAL RELATIONS
OFFICE OF GOVERNMENTAL RELATIONS
UNIVERSITY OF ALABAMA

BEFORE THE
SUBCOMMITTEE ON ENERGY AND
WATER DEVELOPMENT
HOUSE COMMITTEE ON APPROPRIATIONS

FEBRUARY 29, 1996

Written Testimony
Submitted by
Mr. G. William Croker
Subcommittee on Energy and Water Development
House Committee on Appropriations
Thursday, February 29, 1996

Mr. Chairman, Representative Bevill, other distinguished members of the Subcommittee. It is a distinct pleasure to appear before you this morning on behalf of the Coalition of EPSCoR States to testify in support of the DOE EPSCoR program. It is also however, a somewhat sad occasion, and I would like to take the first portion of the time allotted to me to focus on that aspect.

As you are all aware, the dean of the Alabama Delegation and Ranking Minority Member of this Subcommittee has decided to retire from Congress at the end of this session. This is a great loss for the State of Alabama. But recognize it will be a great turning point for Representative and Mrs. Bevill as they enter the next phase of their life together. We would be greatly remiss if we did not use this, our last opportunity to testify before Representative Bevill and this subcommittee, to thank him for his numerous efforts on behalf of our state, and more particularly the University of Alabama System. If I were to merely list, without comment, all of the things he has done for the state and the University System, that mere listing alone would consume well beyond my allotted five minutes. Therefore, let me use this opportunity instead to express our heartfelt thanks to him and to his colleagues on the subcommittee for their support for us over the years. I would also like to introduce for the record, a letter from Chancellor Austin of the University of Alabama System, thanking Representative Bevill for his distinguished service. Representative Bevill, while none of us can adequately express in words our thanks, we hope that as this year progresses we will have numerous opportunities to show our gratitude for your many years of service to your constituents, to the entire state of Alabama and to the nation which you have served so well.

I would also like to salute you, Mr. Chairman. You and your colleague Representative Bevill arrived the same year and you have proven yourselves to be an excellent team in managing this Subcommittee and overseeing the many complex and important programs it funds.

My purpose today is to talk about the Department of Energy EPSCoR program. First, let me thank this Committee for its support over the last six years and ask that you continue to work with us as we enter the next phase of the DOE EPSCoR program. Without the work of Representative Bevill, Representative Myers, Representative Rogers, and other members of this Subcommittee, the DOE EPSCoR program would not exist. It was initiated in this Subcommittee in FY91 with a $4 million appropriation. In 1992 the Congress saw the wisdom of this Subcommittee's action when it completed the Energy Policy Act (P.L. 102-486), and included a specific authorization for the DOE EPSCoR program. Since that time, this Subcommittee has continued to fund the program, most recently at $7 million.

Very importantly, this Subcommittee recommended last year that the EPSCoR program be moved to the Basic Energy Sciences program within the Office of Energy Research. We look forward to a long cooperative relationship with this new program office team.

As we have not yet seen the Administration's 1997 budget, we are unable to comment specifically on the DOE proposed budget for EPSCoR although we hope it will be at a level at least as high as appropriated by this Subcommittee for FY96. Once the budget becomes available, we urge the Subcommittee to examine it closely and provide funding to support a vibrant EPSCoR program in all eligible states.

I would like to explain some of the highlights of the Energy Department's EPSCoR program in Alabama. It has accomplished results far in excess of the modest funding level available. In the first year of the program we accomplished the following:

- Developed unprecedented cooperation among the seven EPSCoR universities in the State - University of Alabama, University of Alabama at Birmingham, University of Alabama in Huntsville, Alabama A&M University, Auburn University, University of Southern Alabama and Tuskegee University.
- Facilitated more direct linkage between Alabama's research universities and its historically black colleges and universities.
- Identified centers of energy expertise among university and industrial researchers.
- Created new opportunities for cooperation in sharing equipment and facilities.
- Expanded interdisciplinary and intercampus research partnerships and improved the funding record for energy-based programs and projects.

One special benefit of particular interest has been the establishment of three focused research clusters in the following energy-related areas:

- Petroleum Reservoir Characterization
- Fusion Energy Research
- Novel Organic Semiconducting Materials

At the faculty and graduate level, we have 41 faculty and professional staff members, 10 post doctoral associates and 14 pre doctoral graduate students actively at work. We also have 7 Graduate Trainees and 4 summer research interns.

In addition, we have 6 summer undergraduate interns, 10 high school summer investigators and 40 high school workshop participants assisting in these projects. To date, our work has resulted in 110 scientific publications, 43 scientific presentations, 14 proposals funded and 14 proposals pending.

With continued support, we expect to achieve significant research results in these three primary research cluster areas. In short, the DOE EPSCoR program is accomplishing its primary objective, making researchers in Alabama and the other EPSCoR states more competitive at the national level, thereby increasing the strength and breadth of the overall science base in the United States. Those of us who are involved in higher education often act like we think that academic research is merely an end in itself, but it's not. Scientific research is a contributing element to economic development and job creation. President Clinton's program emphasizes scientific research because he knows that research leads to the commercialization of products and processes that, in turn, creates high-wage, high-skill jobs. This country needs EPSCoR to stimulate research and generate high-wage, high-skill jobs in states which lag behind the rest of the country in both.

If this Committee continues to support energy research as it has in the past, we pledge our support to you in helping to assure that the rest of the Congress ratifies your action and continues to recognize the wisdom of your support of this important activity. The research activity supported by the Office of Energy Research funds important scientific investigations and studies in medicine, physics, chemistry and the environment. EPSCoR permits states such as Alabama to participate in the exciting and vital research areas managed by the Office of Energy Research.

In closing, let me also ask that the Committee continue its support for the research programs at the Department of Energy. A strong, vital research mission at the Department of Energy is fundamental to the future of our country and our competitiveness in the world.

THE UNIVERSITY OF ALABAMA SYSTEM

THE UNIVERSITY OF ALABAMA • THE UNIVERSITY OF ALABAMA AT BIRMINGHAM • THE UNIVERSITY OF ALABAMA IN HUNTSVILLE

Philip E. Austin, *Chancellor*

February 28, 1996

The Honorable Thomas Bevill
Subcommittee on Energy and Water Appropriations
Committee on Appropriations
2302 Rayburn House Office Building
Washington, DC 20515

Dear ~~Congressman Bevill~~ Tom:

I sincerely regret that I am unable to be with you on Thursday, February 29, to testify before the Subcommittee on Energy and Water. I, like many other citizens of Alabama, have testified before you many times over the years and it has always been a distinct honor and privilege. Your singular devotion to the best interests of the people of Alabama, particularly their education institutions which I represent, is unsurpassed. We sincerely appreciate all that you and this Subcommittee have done for us over your many years of service in the House of Representatives.

On behalf of the Board of Trustees of The University of Alabama, I wish you an active retirement. We look forward to seeing you back in Alabama at university functions whenever you can find time to join us. Many of my fellow citizens will be eager to see you and to convey to you their personal appreciation for your distinguished service and all of your efforts on our behalf over the years.

Sincerely,

Phil

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THURSDAY, FEBRUARY 29, 1996.

NUCLEAR ENERGY ISSUES

WITNESS

PHILLIP BAYNE, PRESIDENT AND CHIEF EXECUTIVE OFFICER, NUCLEAR ENERGY INSTITUTE

Mr. MYERS. Phillip Bayne, President and CEO of the Nuclear Energy Institute. Your prepared statement will be placed in the record and you may proceed as you like for five minutes.

Mr. BAYNE. Mr. Chairman and members of the subcommittee, I am Phillip Bayne, President and Chief Executive Officer of the Nuclear Energy Institute, and I am pleased to appear before you today to present NEI's views on the Federal Government's nuclear energy programs for fiscal year 1997. NEI represents approximately 275 members, including all U.S. electric utilities that operate nuclear power plants.

My testimony today focuses on three issues: The civilian high-level nuclear waste disposal program, the Nuclear Regulatory Commission user fees, and advanced reactor research and development.

As this Nation confronts a new budgetary climate, Congress must not lose sight of previous commitments made by the Federal Government. The Federal Government has a responsibility to begin managing used nuclear fuel from the Nation's commercial nuclear power plants beginning in 1998. To fulfill that commitment, Congress is crafting legislation to authorize a central storage facility in the Nevada desert until a permanent disposal facility is ready.

In recent months, DOE has adjusted its milestones indicating another five-year delay for repository operation, until 2015. By that date, 93 of the Nation's 110 reactors will have exhausted existing capacity to store used fuel at their plant sites.

In this year's budget the subcommittee must balance two major imperatives: Preparing for Federal acceptance of used fuel beginning in 1998, and continuing tightly focused studies at Yucca Mountain. Assuming authorized legislation is passed, the Federal Government must move forward with work at a central storage facility and on other components of the integrated program.

An interim storage program is meaningful only if DOE continues to make progress in developing the permanent repository. In H.R. 1020, the funding source for the civilian waste program would be changed to a user fee concept, assuring that the nuclear customers would continue to pay for the program. Utility customers have held up their side of the contract with the Federal Government. Now Congress must ensure that the Federal Government upholds its responsibility to take the fuel. The nuclear industry is ready to work with the administration and Congress in the development of an integrated spent nuclear fuel management system that can satisfy DOE's commitment to electricity consumers.

In 1995, the U.S. nuclear industry continued to push performance to record levels and to cut production costs. As the electric utility industry becomes more competitive, we must closely examine the budgets in all areas. In this fiscal year, 97 percent of the Nuclear Regulatory Commission budget is being recovered through user fees to the electric utilities. The average utility licensee pays $3.7 million per plant in NRC charges.

We believe the percentage of NRC costs paid by our members should be commensurate with the agency's resources dedicated to regulating the industry. We encourage the subcommittee to examine the commission's budget closely and assign the industry only those costs that are appropriate to protect public health and safety and regulate nuclear power plants. To help maximize NRC resources, the industry recommends that the NRC revise its approach to regulation and allow utilities to meet regulatory requirements without step-by-step prescriptive regulation.

In the area of advanced nuclear research and development, the industry supports appropriating $64 million in fiscal year 1997. The advanced reactor corporation, a consortium of 12 utilities, participates in the development of new reactor designs and represents one of the largest sources of private sector cost-sharing of DOE's energy supply research and development activities.

In recent years, the nuclear industry has front-loaded its cost share with the ALWR program. Now, with the program on the verge of producing market-ready nuclear designs, the industry expects the Federal Government to fulfill its funding obligation with the same commitment. These reactor technologies are between 50 and 90 percent complete. Furthermore, payback provisions in the program will provide a return to the U.S. Treasury when these advanced reactor designs are sold.

This new generation of reactor technology represents a glowing, high-tech industry and is creating opportunities that will strengthen both the U.S. economy and the Nation's leadership. Thank you for your attention.

Mr. MYERS. Thank you very much for your fine testimony. This committee, as you well know, has long recognized our responsibility to help find some place to dispose of the waste, and we are doing everything we can in trying to expedite it as rapidly as we can.

Mr. BAYNE. Yes, sir. Our industry recognizes that and we thank you for that.

[The statement of Mr. Bayne follows:]

NEI

NUCLEAR ENERGY INSTITUTE

TESTIMONY OF PHILLIP BAYNE
PRESIDENT AND CHIEF EXECUTIVE OFFICER
NUCLEAR ENERGY INSTITUTE

BEFORE THE

UNITED STATES HOUSE OF REPRESENTATIVES
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
OF THE
COMMITTEE ON APPROPRIATIONS

February 29, 1996

Mr. Chairman and Members of the Subcommittee:

I am Phillip Bayne, president and chief executive officer of the Nuclear Energy Institute (NEI). I am pleased to appear before you today to present NEI's views on the federal government's nuclear energy programs for fiscal year 1997.

NEI represents approximately 275 companies and organizations worldwide, including all U.S. electric utilities that operate nuclear power plants, nuclear plant equipment suppliers, engineering/construction firms, nuclear fuel cycle companies, suppliers of radionuclides and radiopharmaceuticals, law firms, consulting firms and labor unions.

We would like to thank members of this subcommittee for consistently supporting nuclear energy as an essential component of the nation's energy portfolio. Electricity is one of the cleanest sources of energy, and nuclear energy one of our cleanest sources of electricity. Generating electricity at nuclear power plants produces no air pollutants or greenhouse gases, thus protecting our environment while helping to meet our energy needs.

Mr. Chairman, today my testimony focuses on three issues: the Department of Energy's civilian high-level nuclear waste disposal program, funded through the Office of Civilian Radioactive Waste Management (OCRWM); user fees charged to nuclear utilities to fully fund the Nuclear Regulatory Commission; and the joint industry-DOE advanced reactor research and development effort funded through DOE's Office of Nuclear Energy.

Nuclear Waste Management

As this nation confronts a new budgetary climate, Congress must not lose sight of previous commitments made by the federal government. Under the Nuclear Waste Policy Act of 1982 and contracts between the Department of Energy and electric utilities that own and operate the nation's nuclear power plants, the federal government has a responsibility to begin managing used nuclear fuel from the nation's commercial nuclear power plants beginning in 1998.

To fulfill that commitment, Congress is crafting legislation to authorize the Energy Department to build and operate a central storage facility in the Nevada desert until a permanent disposal facility is ready. Unfortunately, the process of determining the suitability of a candidate repository site at Yucca Mountain has a legacy of delay and budget reductions. In recent months, DOE has adjusted its milestones again, reflecting another five-year delay in repository operation until 2015—if the site is found suitable. By 2015, 93 nuclear units will have exhausted existing capacity to store spent nuclear fuel.

In this year's appropriation, this subcommittee must balance two major imperatives: preparing for federal acceptance of used fuel beginning in 1998, and continuing tightly focused scientific studies at Yucca Mountain.

Last year, the leadership of this subcommittee supported the beginning of an integrated program to manage high-level radioactive waste. Reserving $85 million in the FY96 budget was an appropriate catalyst to focus the program in the right direction. The nuclear industry is working actively with the Congress on passage of the appropriate legislation to move the program further in the right direction—creation of an integrated spent fuel program that includes a federal spent fuel storage facility at a single location and continued work on a geologic repository.

The industry supports continued funding for Yucca Mountain in fiscal year 1997 to continue to study important scientific characteristics of the site, and reach a conclusion about Yucca Mountain in accordance with DOE's revised plans for repository development.

As site characterization activities have progressed, there has been increasing discussion about the way the federal government funds oversight programs for the state of Nevada and affected counties near Yucca Mountain. Affected local governments should continue to receive federal funding for appropriate scientific oversight. However, we remain concerned about allegations that the state of Nevada has misspent millions of dollars. Just this month, Nevada state lawmakers released an audit that found discrepancies in the use of monies by the Nevada Nuclear Waste Project Office and its contractors. The nuclear industry believes scientific oversight is appropriate and necessary. But the program requires the necessary checks to ensure ratepayer funding is spent on appropriate oversight projects, not lobbying and grassroots activities that have been restricted by this subcommittee.

Unfortunately, funding for appropriate oversight by the affected counties has also been adversely impacted as a result of a lapse in congressional authorization. As the members of this subcommittee know, affected counties are not currently receiving oversight funding from the federal government. In a recent exchange of letters between DOE and Chairman Myers and Ranking Member Bevill, the subcommittee reaffirmed report language in the FY96 Energy and Water Development Appropriations bill to withhold oversight money from the state and affected counties.

During consideration of this year's funding, the industry urges the subcommittee to implement effective restrictions to prevent the state of Nevada from further misuse of payments by electric utility customers to the Nuclear Waste Fund, while allowing legitimate oversight programs to proceed. This may involve increasing funding for the affected counties or a more significant role for the Nevada university system. Both have a successful history of scientific oversight work in conjunction with the repository and the Nevada Test Site, and offer a reasonable solution to appropriate use of oversight money.

The nuclear energy industry has general principles that we believe should guide Congress as it continues to reshape the DOE program:

- DOE must finally accept responsibility to develop and begin implementing a waste management system that is capable of removing spent fuel from nuclear reactor sites in 34 states beginning in 1998.
- Congress must designate a location for, and mandate construction of, a federal interim storage facility and the necessary transportation network to ensure access to the facility from existing rail lines.
- Milestones must be established for the development of the interim storage facility and transportation infrastructure to support spent fuel acceptance beginning no later than Jan. 31, 1998.
- Site characterization for development of a repository must continue. Disposal of spent fuel remains the ultimate program objective.

In H.R. 1020, authorizing legislation pending before the House of Representatives, the funding source for the civilian high-level radioactive waste program would be changed to a user fee concept, ensuring that nuclear utility customers would continue to pay for the program. Importantly, the waste program customers would get one dollar's worth of services for each dollar appropriated by this subcommittee to the program. Utility customers have held up their side of the contract with the federal government since 1983 by committing approximately $12 billion to the Nuclear Waste Fund. Now, Congress must ensure that the federal government upholds its responsibility to begin taking spent nuclear fuel from commercial reactors in 1998.

As the members of this subcommittee know, utilities and state regulators are increasingly concerned about the equity of requiring utility customers to pay for both the DOE civilian radioactive waste program and additional at-reactor storage. Seventeen utilities and 28 states have filed separate lawsuits against the Energy Department asking the Circuit Court of Appeals to rule that DOE must begin accepting spent fuel beginning in 1998. Additionally, regulators in a handful of states are considering withholding electricity consumer payments to the Nuclear Waste Fund due to inaction by the federal government.

DOE recognizes that failing to meet its 1998 responsibility will cause utilities and their customers to face significant costs associated with expanding spent fuel storage at reactor sites. Although there is an urgent need to develop a central storage facility now, an interim storage program is meaningful only if DOE continues to make progress in developing a permanent repository.

The nuclear waste disposal issue will be solved only when the federal government satisfies its responsibility to begin accepting spent fuel beginning in 1998. We are ready to work with the administration and Congress in the development of an integrated spent nuclear fuel management system that can satisfy DOE's commitment to electricity consumers.

The nuclear industry is also concerned that DOE funds are being spent for additional scientific tests at the proposed low-level radioactive waste disposal site in California despite the fact that low-level waste disposal is a state, not a federal, responsibility. California has already exhaustively studied the Ward Valley site and has not asked for DOE assistance.

Nonetheless, the Interior Department again delayed the transfer of land at Ward Valley, Calif., for this facility. Instead, the Interior Department ordered new tests and asked DOE to conduct a year-long study of the site. The administration requested this new study despite assurances from NAS and the state of California that the site is safe. Mr. Chairman, the industry believes that funds appropriated by Congress should not be used to conduct this study, which amounts to an election-year payoff that sacrifices the needs of patients and consumers. Congress instead should take appropriate action to prevent further obstruction by the federal government in California's efforts to comply with the Low-Level Radioactive Waste Policy Act.

NRC Budget/Regulatory Review

The nuclear energy industry continued to push plant performance to record levels and cut production costs in 1995. America's nuclear plants established record levels of efficiency for the sixth straight year—achieving a 76.7 percent capacity factor. While continuing a steady upward trend over the last 10 years in increased productivity, utilities that operate the nation's nuclear power plants cut operating and maintenance costs by 8 percent from 1993 to 1994.

Lower production costs and increased production translate to electricity costs at nuclear power plants that are competitive with coal-fired plants and cheaper than oil, natural gas and renewable energy sources.

As the electric utility industry becomes more competitive, utilities must closely examine their budgets in all areas. And while the industry is committed to maintaining its exemplary safety record at nuclear power plants, it expects Congress to use fairness and equity in allocating user fees that comprise 100 percent of the NRC's annual budget.

Since FY91, NRC licensees have shouldered the entire cost of the agency's budget through annual user fee payments. Of the NRC's FY96 budget, 97 percent—$462.3 million—is recovered by assessing user fees to utilities and their customers. The average utility licensee pays $2.7 million per nuclear power plant, plus an average of $1 million per plant in hourly charges for NRC activities.

This level of support is unique to the nuclear energy industry and it is unlikely to change absent pressure on the commission by this subcommittee to operate more effectively on a leaner budget. The NRC's costs should be no higher than required for the agency to ensure protection of public health and safety. We believe the percentage of NRC costs paid by our members should be commensurate with agency resources dedicated to regulating the industry—not international programs and other federal agency activities.

For a five-year period beginning in FY90, the commission budget increased by approximately 25 percent. There is clear evidence of budget and management inefficiencies at the NRC. The NRC Inspector General (IG) has published several reports since 1992 that document NRC management deficiencies that can be directly attributed to its user fee policy. In fact, a 1994 NRC staff study found that utilities pay at least $35.1 million annually in fees to support activities that have no bearing on the regulation of commercial nuclear energy facilities.

As the subcommittee can see, there is a pressing need for improvement in containing the NRC budget and in ensuring the equity of the commission's user fee policy. The nuclear industry will continue to pay for NRC programs from which it receives benefits and for those programs that contribute to protecting public health and safety. However, we encourage the subcommittee to examine the commission's FY97 budget closely and assign the industry only those costs that are appropriate to regulation of nuclear power plants.

The industry recognizes that the NRC absorbed about a 10 percent budget decrease in FY96 by reducing programs in its headquarters operations. Further budget reductions should not be made at the expense of the Office of Nuclear Reactor Regulation, as they were this year. Rather, the agency should closely examine its regional alignment and areas of redundancy that result from that configuration.

The industry recommends that the NRC revise its approach to regulation and implement targets that allow utilities to meet regulatory requirements without step-by-step, prescriptive regulation. Such a performance-based regulatory system would maximize NRC resources and enhance efficiency in this tight budgetary climate. We commend the NRC for beginning that transition by implementing a performance-based maintenance rule for nuclear power plants, and encourage the commission to continue the transition with future rulemakings.

The industry is seeking to redefine the relationship between the NRC and its nuclear utility licensees to achieve a regulatory environment that:

- preserves the commission's statutory mandate to protect public health and safety;
- preserves the licensee's ultimate responsibility for safe operation; and
- meets certain fundamental criteria of openness, clarity, consistency and efficiency.

Advanced Reactor Research and Development

In the area of advanced nuclear energy research and development, the industry supports $64 million in FY97 for the DOE-industry cost-shared program to develop advanced light water reactor (ALWR) technology.

A consortium of 12 utilities called the Advanced Reactor Corporation (ARC) participates in the development of new nuclear power plant designs, and represents one of the largest sources of private-sector cost sharing to DOE's energy supply research and development activities. In recent years, the nuclear industry, through ARC, has front-loaded its cost share commitment for ALWR research and development. Now, with the ALWR program on the verge of producing market-ready nuclear designs for the 21st Century, the industry expects the federal government to fulfill its funding obligation with the same commitment.

The federal government's investment in these valuable research and development projects is essential to continuing nuclear energy's strategic role in the nation's energy portfolio. These reactor technologies are between 50 percent and 90 percent complete. Furthermore, payback provisions in the program will provide a return to the U.S. Treasury when these advanced nuclear power plants are built to meet future electricity demand.

The Energy Policy Act of 1992 provided a multi-year authorization for the ALWR design certification and first-of-a-kind engineering (FOAKE) programs to support the commercialization of advanced reactor designs. The industry funds more than half of the program, and has upheld its side of the agreement. However, continued federal participation is essential to completing the program.

Approximately half of the funding in FY97 is needed to complete first-of-a-kind engineering work on two advanced light water reactor designs. This work will provide pre-commercial engineering beyond the scope required by the NRC for design certification. Another portion of the funding includes design certification for two smaller, passively safe plants.

The ALWR program meets all four of the national energy goals for prioritizing the Energy Department's R&D projects as established by the 1995 Yergin Report:

- economic strength,
- energy security,
- environmental quality, and
- science and technology leadership.

Moreover, the ALWR program fulfills all of the objectives for cost-shared programs recommended by the Yergin Report. Those objectives include leveraging government R&D spending, introducing market relevance into R&D decision making, and accelerating the R&D process and transferring the results to the marketplace.

This new generation of commercial reactor technology represents a large and growing high-tech industry and trade opportunities that will strengthen both the U.S. economy and the nation's leadership in ensuring the peaceful use of nuclear technology.

Continuing U.S. leadership in the world market for nuclear technology is critical. America holds a slim to commanding edge in various areas of nuclear energy technology, but other nations, such as France and Japan, have state-subsidized nuclear programs that are competitive in the global market. The United States cannot afford to lose its market advantage because of a short-sighted R&D strategy.

The nuclear industry firmly believes the United States must continue to set the worldwide standard to provide the safest and best engineered nuclear designs, components and fuel services. Many nations will not consider U.S. reactors unless they are certified by the NRC, one of the goals of the ALWR program. Elimination of this program will signal to other nations a serious lack of constancy in U.S. policy, calling into question the reliability of U.S. manufacturers and jeopardizing their participation in billions of dollars of projected nuclear projects worldwide. The nuclear export market is significant, with up to 50 nuclear power plants expected to be ordered in Southeast Asia over the next 15 years.

The nuclear industry believes past funding reductions and long-range plans by the administration to reduce funding for nuclear research and development activities do serious damage to our ability to meet the nation's long-term electricity needs and power economic growth. This subcommittee must maintain and support research to advance nuclear energy in this country.

Finally, as part of DOE's nuclear R&D program, the industry supports funding for the university reactor assistance and support programs. The industry programs are necessary for valuable nuclear research and training. Continued congressional recognition of these programs for future leaders in high-tech nuclear technologies is essential to ensure America's leadership in nuclear energy programs.

THURSDAY, FEBRUARY 29, 1996.

SOLAR RESEARCH AND DEVELOPMENT PROGRAMS

WITNESS

SCOTT SKLAR, EXECUTIVE DIRECTOR, SOLAR ENERGY INDUSTRIES ASSOCIATION

Mr. MYERS. Next is Scott Sklar, who is Executive Director of the Solar Energy Industries Association.

Welcome back, Scott.

Mr. SKLAR. Thanks, Mr. Chairman. I have some great news for you, and I brought props to boot.

First, I want to let you know that the solar industry, which is composed of over 550 companies that belong to our association and our affiliate State chapters, is thriving. The DOE program that I am about to testify on, I want to tell you, we are on time, we are on budget, and we have one of the most highly cost-shared programs in the DOE portfolio.

The good news on the photovoltaic side is that we ribbon-cut in the last few months three now-automated manufacturing facilities, and we expect three more by year-end. That was no surprise; there is no mistake in that. It was due to the long, historic and bipartisan support of this committee in working with our industry.

The three manufacturing facilities are ENRON in Virginia—and Harvey Forest will tell you about that—Amoco in Vancouver, Washington; and Siemens USS in Michigan, with United Solar ECD. In fact, with the Michigan one, they will be producing roofing shingles, PV roofing shingles. A lot of rooftops there.

The reason we have this success is that during the Bush administration, they said, we want a program that is just not pure R&D, we want to drive the technology in the marketplace; and we developed a 50-50 cost-shared program to help the industry overcome technological hurdles to automate manufacturing. What you see is that cost-share. That is the result of getting six new plants in 1996 all automated.

The second one was incurred in this Clinton administration, which was: Automated plants are great, but where is the product going to go?

Now, the market-driver has been the international market; 70 percent gets exported to Third World countries. We are the cost-effective technology, the global leader, but to attract U.S. capital, to build automated facilities, we needed some technological assistance to our key markets, utilities and the building sector. So we established two more cost-shared programs, three-to-one by the utility sector called PV-Compact, and that was to get 91 utilities, half of the U.S. generation market in the U.S., to cost-share photovoltaics in their markets so they build up the experience to do aggregated purchases. And that is the process we are in, PV BONUS, to incorporate it in buildings, roofs, tinted windows; and it will—that will drive the research into the marketplace on a sustainable basis.

The second has been solar thermal power, the high temperature side. In June, we are ribbon-cutting the solar central receiver in California, the world's first base-load solar power plant. Rain or shine, day or night, eight utilities, 50 percent cost-shared. Southern

California is the leading partner, and our markets, China, Brazil, Mexico.

We also have a great company from Indiana called COMENS, and it is ribbon-cutting its automated manufacturing facility in Texas to do solar-driven engines—25 kilowatt, 7 kilowatt programs, cost-shared, part of the first of three teams, again driving it into the market. What we are intending to do is we have been working on the Solar Enterprise Zone in Nevada on the test site. We will have 1,000 megawatts over the next decade, all industry financed. The government row, A, the Department of Defense is doing the environmental impact statements, so we don't have to worry about the nuclear side of it.

Secondly, the Department of Energy is driving long-term contracts with the Western Area Power Administration at the going rate. The goal is not subsidy, just the right for long-term contracts.

The solar buildings program, this is a part—a panel, but it is the—actually the coating, and these are used for space heating. The largest one just went up on a 200-foot building in Ontario. Solar space heating, the industry is really starting to move, all because of highly selective coatings to do space heating, absolutely cost-effective now, driving.

What I want to tell you is, I know there are concerns with budgets, and I know the hard stuff you all have to do, but we have met the challenge, we show we can cost-share, and we are not profitable yet really as industries, because we are in our evolution mode. We are on time, we are on budget, we have the metrics.

My final point to you is we have had a couple of other small programs within the solar budget, on the international side, the resource assessment and storage. One of the evolving things in research that we want you to know in Congress is, there are some things industry cannot do—resource assessment from a global perspective, some of the new technologies involved with storage—so when the sun is not shining, we can be competitive.

These were teeny programs. We need you to be aware of them because that is the cross-cutting feature so that you will see that this technology will be on rooftops in every State of this country. Thank you for your support.

Mr. MYERS. Well, thank you for your testimony, and presenting here your progress. I need a new roof this year. Should I start ordering these? Do I need to sell the farm first to pay for it?

Mr. SKLAR. No. We will work out an Ethics Committee deal for you. That won't be any problem.

Mr. MYERS. Sometimes you might just let us know what the comparable cost is. Thank you very much for your testimony.

Mr. FAZIO. Mr. Chairman, could I just say, if Scott ever shows up here without any props, we should just cut his budget totally. His is always one of the better shows we have.

Mr. SKLAR. I keep up the challenge.

[The statement of Mr. Sklar follows:]

OLAR ENERGY INDUSTRIES ASSOCIATION 122 C Street, N.W. 4th Floor Washington, D.C. 20001-2109 (202) 383-2600
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TESTIMONY

by

Scott Sklar
Executive Director

SOLAR ENERGY INDUSTRIES ASSOCIATION

before the

COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
U.S. HOUSE OF REPRESENTATIVES

on

FISCAL YEAR 1997 APPROPRIATIONS
for
SOLAR ENERGY (AND RELATED) PROGRAMS

of the
U.S. DEPARTMENT OF ENERGY

February 29, 1995
WASHINGTON, D.C.
☐

Abbreviated version

SOLAR ENERGY INDUSTRIES ASSOCIATION

Introduction

The Solar Energy Industries Association (SEIA) is the national trade organization of the photovoltaics and solar thermal manufacturers and component suppliers, composed of over 550 companies, 400 of whom are members of SEIA's affiliated state and regional chapters. Today's U.S. solar energy industries are comprised of manufacturers, component suppliers, distributors, and installers involved in the development and deployment of a wide variety of solar energy systems, including hundreds of small entrepreneurial businesses across the nation as well as Fortune 500 corporations.

SEIA is recommending a $162.25 million solar research, development and demonstration budget (RD&D) for FY '97 within the U.S. Department of Energy. This recommendation is roughly equivalent to FY '95 funding levels and is approximately 28 percent above the FY '96 appropriated levels. SEIA believes this is the minimum acceptable level of the federal research program in order to insure that the U.S. global technical leadership results in sustainable businesses -- in other words, that the U.S. doesn't fall into the old path of "VCR Syndrome" where the U.S. invents technology only to lose out on the hundreds of thousands of jobs and millions of dollars of profits on commercializing these technologies.

SEIA believes that the federal solar programs are well managed, have the highest cost-shares, and are on-time and on-budget. Our industry, which is primarily small business, has met its obligations which are significant for a small, emerging industry.

All SEIA asks is that Congress stick with its commitments to our industries begun under the Bush Administration and continued under the Clinton Administration. We have and are ready to meet our commitments to the American people.

Summary

I am here to today to make three points, which together should compel the Subcommittee to support the solar energy programs:

1. Federal spending for solar energy technology development, especially spending that is cost-shared with the private sector, is a wise investment that pays off.

2. Failure to fund the solar energy programs at critical levels would represent nothing less than abrogation on the part of the U.S. government of multi-year commitments to U.S. industry.

3. Solar energy budget cuts along the lines of those made in FY 1996 will result in unrecupable co-investment and will drive private investment from our emerging industries.

SEIA's FY 1997 Appropriations Recommendations

SEIA's FY 1997 budget recommendations for the U.S. DOE's solar energy programs, outlined in detail in Attachment A, were crafted by the solar industry in consultation with state governments, the research community, and utility and building industry leaders to result in the most cost-effective leveraging of federal dollars to bridge the gap between research and commercial viability.

The following table summarizes our basic recommendations:

SEIA'S FY 1997 SOLAR ENERGY R&D APPROPRIATIONS RECOMMENDATIONS ($ millions)	
Core Technology Programs	
Photovoltaic Energy Programs	92.2
Solar Thermal (Electric & Industrial) Programs	32.5
Solar Buildings Technology Research	6.25
Other Programs	
Solar International	9.0
Renewable Energy Production Incentive	5.0
Resource Assessment	4.0
FEMP (IHEM)	3.5
Energy Storage	5.0
Hydrogen (through renewable energy resources)	5.0

Photovoltaic (PV) Programs

During the last several months, ground-breaking ceremonies for three automated photovoltaic module manufacturing plants were conducted in Michigan, Virginia, and Washington and three more are expected to be launched before the end of 1996. Two new U.S. manufacturing ventures overseas were announced for Russia and South Africa. This represents the largest growth in manufacturing capacity in the history of photovoltaics and American industry is the driving force in the expansion. The federal government has been instrumental in driving this growth trend by sharing the risk with industry in the development of new manufacturing processes, materials, and by facilitating domestic market engagement.

These phenomenal advances in manufacturing capacity came as no surprise to those of U.S. in the industry and they have occurred for three primary reasons. First, the opportunities in the international markets are booming, with two billion people currently without electricity and another billion with less than 10 hours of reliable power per day. International markets, primarily in the developing world, already account for over 70 percent of U.S. photovoltaics exports.

Second, these new manufacturing facilities are the result of a significant departure from the business-as-usual government research and development programs. During the Bush Administration, the PV industry embarked on a cost-shared PV Manufacturing Initiative (PVMaT) program in conjunction with the Department of Energy to overcome technological hurdles to scale -up manufacturing. The program was designed to build on the Japanese experience that proved the effectiveness of reducing costs through more efficient manufacturing techniques, rather than through pure research on cell efficiencies.

Third, during the Clinton Administration, the PV industry entered into two cost-shared programs with the federal government designed to build market confidence in the electric utility and building industry sectors.

The PV-COMPACT program established a cost-shared market acceleration mechanism by engaging over 90 electric utilities (representing half of the U.S. generation capacity) and formed the Utility Photovoltaic Group (UPVG) with support from state regulators and state consumer advocates. The PV-COMPACT approach has been to promote interest and investment by the electric utility industry in photovoltaic technology with a goal of building a sustainable market aggregation program. Only in this way will the technical capacity be built in the electric utility sector necessary for multi-year, mass quantity purchases.

Similarly, PV-BONUS was conceived to drive the development of innovative PV products for the commercial and residential building sector. As a result of the accomplishments of PV BONUS, one of the new American PV manufacturing facilities will produce PV roofing shingles. In addition, PV BONUS has enabled U.S. industry to develop PV window glass for commercial buildings, as well as innovative PV roofing and siding products. The cost-shared federal investment in PV building technologies has produced these innovations which will flow into the marketplace over the next decade.

SEIA has also recommended increasing the funding for the Thin Film Partnership Program, which is cost-shared with the U.S. industry to drive the development of new materials in this unique applied R&D program, will keep the U.S. a global technology leader

SEIA is requesting a $92.2 million program, which represents level funding with the FY 1995 appropriation. However, SEIA's recommendation differs significantly from either the FY 1995 or FY 1996 RD&D programs in that it increases funding for cost-sharing agreements for the PV manufacturing efficiency program to maintain the momentum in driving new approaches to automation.

SEIA has suggested that international program activities within the PV programs be dropped except in cases where they provide technical expertise to multilateral funding agencies or procurement officials administering international tenders. Again, generic international activities should be carried out elsewhere in the DOE budget or via other federal agencies such as AID or the export assistance agencies (e.g., TDA, OPIC, EXIMBANK).. SEIA will not explicitly endorse RD&D programs in generic research that have little interplay with the PV industry's strategic needs.

Solar Thermal Electric and Industrial Programs

In calendar year 1995, four major events characterized the success of the Solar Thermal RD&D program:

- the grand opening of the first ever solar/dish engine manufacturing facility (Texas), the unveiling of the Solar Two central receiver, the prototype for solar-only baseload power plants,

- the creation of an economic development zone for 1,000 megawatts of large scale, privately-financed solar electric projects at the Nevada Test Site called the Solar Enterprise Zone,

- a rejuvenation of international markets for solar thermal electric technologies, with over 800 megawatts of projects under discussion.

These milestones are a direct result of the new directions this R&D program took under the Bush Administration and continued under the Clinton Administration. While the United States led the world in first generation solar thermal electric technologies -- in the 1980s, 354 megawatts of commercial solar thermal electric plants were installed and continue to operate reliably -- falling fossil fuel prices required the development of more efficient technologies and designs. In the early 1990s, DOE entered into partnership with the solar energy industry to develop next- generation solar thermal electric technologies by the late 1990s, leading to a series of 50-50 cost shared, five-year joint ventures which have generated more than $150 million in commitments from the private sector.

SEIA's FY 1997 budget recommendation is $32.5 million, which is essentially on par with the amount appropriated in FY 1995, and is essential to keep this effective program on course to:

- maintain original commitments to complete the three solar dish engine joint ventures, which will include transforming demonstration units into prototypes ready for mass manufacturing,

- maintain the original commitment for a three year test and evaluation phase at Solar Two. Already, an industrial consortium is developing plans for commercial scale plants in domestic and export markets, but their ability to move forward hinges on developing operating experience and data at Solar Two,

- maintain a basic R&D program which will allow the continuation of projects which enhance the durability, performance, and reduce the cost of system components in support of the joint venture projects, and

- assist U.S. firms in pursuit of project opportunities in export markets and the Solar Enterprise Zone.

If the Subcommittee supports SEIA's FY 1997 recommendations, DOE will be able to fulfill its side of the bargain in these five-year joint venture efforts to develop next generation technologies. If DOE cannot maintain its commitments, these $1 billion export projects and 40,000 jobs by 2005 will, without a doubt, go to German, Israeli, Japanese, and Australian companies.

Solar Building Programs

With solar thermal technologies installed on over 1.5 million buildings today, displacing over 1,000 megawatts of energy and the building sector representing over 35% of this nation's annual energy consumption, this small program deserves continued enthusiastic support from Congress.

The Solar Buildings program was cut by 60% in FY 1996. SEIA's FY 1997 recommendation of $6.25 million represents level funding from the FY 1995 appropriation, and will ensure that the standards certification, utility initiatives, and federal and state facility technical assistance programs are continued.

The accomplishments of the program to date have been:

- the development of one of the few national technology performance and certification standards now being utilized by utilities and state governments around the nation;
- the creation of the Utility Solar Water Heating Initiative (Us H_2O), a collaborative effort leveraged by both municipal and investor-owned utilities, aimed at assisting utilities in establishing programs that support the installation of solar thermal technologies for buildings;
- the establishment of technical validation and assistance mechanisms that provide support for government procurement officials on both state and federal levels; and the continuation of focused market-oriented R&D efforts that have led to major technology innovations in solar space-heating applications.

While small programs seem to suffer the brunt of recent budget cutting, it is often the small programs that cost-effectively leverage private resources to create the highest value results. This is clearly the case with the Solar Buildings program. First, the biggest market barrier for solar building technologies has been a technical one in that end-users, whether they be utilities or building owners, need energy savings "rules of thumb" from independent third parties. In this case, the industry along with universities, national laboratory experts and the Florida Solar Energy Center, have developed a set of reliable certification standards for solar thermal building components and systems. This certification program, in its final stages of development, now must be integrated into a myriad of international, federal, state, and local government standards programs.

Second, to scale-up manufacturing the industry needs aggregated purchases from the utility industry and its suppliers. The utility and energy service industries are looking to solar water heating technologies as a major opportunity to retain market share, offset peak demand, and address customer concerns with respect to energy conservation. The Solar Buildings program has recently supported the development of key analytic tools and model technology validation projects resulting in increasing interest in solar water heating among utilities - including the Sacramento Municipal Utility District (SMUD) who have initiated a program leading to over 1,000 solar water heaters in their service territory in a two year period. Other utilities such as General Public Utilities, Green Mountain Power, Lakeland Electric, and Wisconsin Public Service among others have begun to follow suit. If the Subcommittee supports a strong RD&D program at FY '95 levels rather than at the close-out level driven at the last minute in FY '96, SEIA believes that five more utility solar water heating programs can be promised (all at their own expense as current programs will be financed).

Related Programs:

The Solar Energy Industries Association (SEIA) has been a proactive supporter of key cross-cutting RD&D programs at the FY '95 appropriated levels. SEIA wants the Subcommittee to note that only the federal government can support these kind of efforts in that they require resources beyond individual companies or industry sectors. These programs deserve support because they can truly leverage U.S. international competitive advantage and yield a wide range of assets to many industries and enduses.

Solar International: Three distinct activities fall under the Solar International Programs, all of which assist U.S. manufactured renewable energy technologies in maintaining their global dominance. No less than $2.5 million of any appropriation within this line-item must go to support the federal interagency Board, the Committee on Renewable Energy Commerce and Trade (CORECT). This program, signed into law by President Reagan, insures that all 13 federal agencies and entities coordinate proactively together to promote renewable energy exports. The program has developed several new models including a unified export financing form, prefeasibility financing entity, multilateral bank bundling programs, and identification of over $1 billion of projects by U.S. industry primarily, but not limited to, South Asia and Latin America.

The remaining programs, America's 21st Century established by the Bush Administration, was not supported in FY 1996 but must be reinstituted in FY 1997 if we are to drive projects in our hemisphere. Finally, the Joint Implementation program was truly begun in FY 1996 with industry and non-government organizations partnering in driving projects. This is a worthy program as long as it maintains its project focus with an emphasis on renewable energy and energy efficiency.

Resource Assessment: This small program deserves restoration in that it provides resource mapping of renewable resources globally. If endusers are not able to ascertain the quality of their renewable resource, they will either not use or incorrectly specify equipment. This activity is the underpinning of the entire renewable energy RD&D program and must be restored to FY '95 funding levels.

Energy Storage Systems: All renewable energy resources need to incorporate unique storage applications and this small program needs to be restored to FY '95 funding levels, Use of batteries, see-through capacitors, harmonics equipment for hybrid renewable/battery/conventional energy systems represent the kind of innovative research and applications necessary. Again this is another kind of underpinning activity to all renewable energy technologies and its program needs restoration.

Hydrogen: One of the new start programs driving to the sustainable economy this country must have after the year 2000. This program which has little interaction with the renewable energy industries deserves support, yet redirection, into a more collaborative program with solid metrics and industry cost-shares.

Federal Energy Management Program: The Department of Energy's In-House Energy Management (IHEM) Program, under the direction of the Federal Energy Management Program, has previously provided the necessary resources and services to reduce energy consumption, improve energy efficiency, and reduce utility costs throughout the Department's facilities and operations. The IHEM Program is currently saving the Department over $100 million annually through its investments in energy efficiency and renewable energy projects. The IHEM Program has had a return on investment of over 25 percent, with a net return of $5 in energy or water savings for each $1 invested at DOE facilities, not including the additional environmental benefits. Despite this success, there is still considerably more potential energy savings.

SOLAR ENERGY INDUSTRIES ASSOCIATION

The Solar Energy Industries Association supports the continuation and funding of this IHEM Program as both a means of Federal budget deficit reduction and as a visible demonstration of the success of our energy efficient and renewable technologies. Even at reduced funding levels, this program needs to be continued to emphasize energy management within the Department, by accomplishing these projects through leveraging with non-Federal resources such as utility rebates and private-sector financing. SEIA strongly recommends the Federal Energy Management Program to work cooperatively with the Office of Utility Technologies on a $3.5 million effort for a large scale increase in the use of solar in the Federal sector. This effort not only addresses the President's call for "significantly increasing" the use of solar and renewables in Federal facilities, but would lead by example and signal the industry that the large Federal sector can serve as the foundation for major market expansion.

THURSDAY, FEBRUARY 29, 1996.

NUCLEAR ENERGY RESEARCH AND DEVELOPMENT

WITNESS

ROBERT VIJUK, PROJECT MANAGER, ENERGY SYSTEMS BUSINESS UNIT, WESTINGHOUSE ELECTRIC CORPORATION

Mr. MYERS. Robert Vijuk is the Project Manager of the Energy Systems Business Unit at Westinghouse.

Your prepared statement will be placed in the record and you may proceed as you would care to.

Mr. VIJUK. Good morning, Mr. Chairman, and thank you for this opportunity to discuss the Department of Energy's nuclear energy research and development programs; and in particular, the advanced light water reactor program and the AP600.

I am the Project Manager for AP600 at Westinghouse. We extend our thanks to this subcommittee for your unwavering support of the AP600 and the ALWR program. Your support in 1996 was critical and decisive in maintaining the program.

Congress's Energy Policy Act of 1992 defines several imperatives which must still be addressed. Key among these is the need to keep the nuclear option open for the United States. Keeping in the forefront of nuclear energy is also vital from an international perspective. The United States has long been a world leader in commercial nuclear technology, and without a strong program, our influence in shaping international nuclear nonproliferation would be greatly diminished.

The nuclear export market is also expected to be significant. We expect 50 nuclear plants to be built in Southeast Asia over the next 15 years. The modular engineering and fabrication that the AP600 employs could result in a high U.S. job content. One plant order alone can result in 5,000 jobs for five years.

In 1990, Westinghouse was awarded the cost-shared design certification contract for AP600. In 1993, the companion cost-shared program on first-of-a-kind engineering was awarded to Westinghouse as a result of a market-driven utility selection process. These two programs will provide the certainty in safety, licensing, cost and schedule which are needed for public investor and utility confidence to proceed with nuclear power.

Westinghouse has already expended $125 million on these two essential programs, and we have committed to repay $25 million to the DOE for their funding on design certification from royalties on the sale of the first plant. We have proceeded aggressively with the program and we have completed our test program at the Oregon State University and all other design certification testing efforts. The results of these programs have been used to verify our computer programs and to evaluate the performance of the AP600. All of these results are under review by the Nuclear Regulatory Commission as we speak, and in addition, the NRC is currently using our world-class Oregon test facility for their own research program.

In 1996 Congress approved $40 million for the ALWR program, and DOE allocated $11 million as their share of our AP600 design certification cost. This was a $3 million reduction from the amount needed to keep the program on track. While we made good progress with the NRC, we also suffered substantial increase in the fees charged by the NRC. As a result, the original final design approval target of December 31, 1996 cannot be achieved. The program is now 88 percent complete, and it is targeted to have final design approval from the NRC by the end of the first quarter in 1997 provided that funding levels are maintained.

For 1997, out of the total amount appropriated for the ALWR program, $10 million is needed for the AP600 design certification. This is less than 1996, and about two-thirds of that amount will be used to offset the user fees that we must pay to the NRC. The balance is essentially the $3 million shortfall from 1996. Further delays beyond those that have already resulted will give foreign competitors the crucial advantage in international markets that potentially deprive the United States of these very American labor-intensive orders.

Under the 1992 FOAKE agreement between DOE and ARC, the ARC was to fund and manage FOAKE for two of the advanced reactor designs that are under certification. The majority, 63 percent of the FOAKE funding comes from private sector utilities and reactor designers. The other 37 percent comes from the DOE, and DOE's contribution will be repaid from revenues received from the sale or licensing of plants or technology developed in the program.

ARC selected the AP600 as the midsized plant to receive FOAKE funding. The AP600 FOAKE program is now 52 percent complete and it is on schedule for completion in 1998.

The funding required for FOAKE in fiscal year 1997 is $17 million. FOAKE is vital to the utility industry's efforts to assure that nuclear option is preserved and to the ARC—DOE–ARC contractual agreement which is indicative of the joint commitment.

In summary, for 1997, out of the total amount appropriated for ALWR, $27 million is requested for the AP600 core program.

In summary, on the cost-sharing, this is probably the lowest cost-shared program you have heard of today. $2 out of every $3 comes from industry and we commit to pay back most of that third dollar from the sale of the plants.

Mr. MYERS. That sounds like a deal we can't pass up, doesn't it? Thank you very much for your testimony.

[The statement of Mr. Vijuk follows:]

UNITED STATES

HOUSE OF REPRESENTATIVES

COMMITTEE ON APPROPRIATIONS

ENERGY AND WATER

SUBCOMMITTEE

Testimony

of

Robert M. Vijuk

Westinghouse Electric Corporation
Energy Systems Business Unit

Monroeville, Pennsylvania

February 29, 1996

Good morning, Mr. Chairman; thank you for this opportunity to discuss the Department of Energy's Fiscal Year 1997 Nuclear Energy Research and Development Programs, and in particular, the AP600 and Advanced Light Water Reactor Programs.

I'm Bob Vijuk, Project Manager for AP600 Design Certification in Westinghouse Electric Corporation's Energy Systems Business Unit. Westinghouse has testified before this distinguished Subcommittee in the past, and at the outset, we extend to its Members and staff our thanks and the thanks of the Industry for your wholehearted and unwavering support of the AP600 and the ALWR program. Your support was critical and decisive in maintaining the program in FY '96, and we are able to move forward both on design certification and First-of-a-Kind Engineering. Today, we want to summarize for you, the accomplishments of the program and also define for you the program and funding requirements for FY '97.

Congress's Energy Policy Act of 1992 defined several imperatives which must be addressed throughout the remainder of this century. Among these imperatives is the need to ***keep the nuclear option open for the United States.*** In response and in parallel, the nuclear industry has developed a comprehensive strategic plan aggressively devoted to making sure that this country has the nuclear option when needed.

Toward these ends, Westinghouse continues to invest heavily in the development of advanced nuclear plants. The facts support our belief that, even with necessary and aggressive conservation, increased energy efficiency, and advancements in renewable energy resources, new baseload power plants will be needed to support economic growth in the next century. Our nation's economy, growing even at a moderate rate, will dictate the need for additional generation capacity. As the need for new baseload generating capacity arrives during the next 15 years, we must have all available options at the ready so that effective choices can be made.

Keeping in the forefront of nuclear technology is also vital from an international perspective. The United States has long been the world leader in the commercialization of nuclear technology and the world continues to look to us for technology development. Indeed, without a strong nuclear program, our influence in shaping the international nuclear non-proliferation regime would be greatly diminished.

We firmly believe that we must continue to set the worldwide standard to provide the safest and best-engineered nuclear designs, components, and fuel services worldwide. The nuclear export market is also significant with up to 50 nuclear power plants expected to be built in Southeast Asia over the next 15 years. The modular engineering and fabrication concepts in the AP600 result in a high U.S. content and one plant order ***alone*** would provide up to 5,000 jobs for five years.

The AP600 design has generated such strong interest worldwide that 20 nations (including France, Italy, Spain and Japan) have joined the engineering and testing efforts. This international coalition is strong evidence that the world still looks to the United States for leadership in nuclear power and that AP600 meets the test of a world-class product. Congress's recognition of potential worldwide environmental problems, if the energy needs of Southeast Asia are met solely with fossil fuel plants, places additional emphasis on the importance of AP600.

AP600 is a simplified, safe, and economical 600-megawatt power plant, poised to provide a new era of nuclear power generation. Designed to satisfy the standards set by the U.S. Department of Energy and embodying the principles of the Advanced Light Water Reactor Utility Requirements Document, AP600 is an elegant combination of innovative safety systems that rely on dependable natural forces and proven technologies.

As is well known worldwide, the Westinghouse AP600 approach has been to provide certainty -- to the utilities, to the financial community, and to the public -- with a design that:

- Simplifies plant systems and equipment, operation, inspections, and maintenance by greatly reducing the amount of valves, pumps, piping, HVAC ducting, and other complex components.
- Uses experienced-based power generation components which are designed to offer a high level of reliability.
- Provides a high degree of public safety and licensing certainty.
- Shortens construction schedules and increases schedule certainty by the use of modular components, giving AP600 the ability to be constructed in three years from pouring the first concrete to fuel loading.
- Uses standardization to offer electric power at a competitive cost.

From 1985 to 1989, Westinghouse completed preliminary design and proof of principle testing for AP600, including cost and schedule estimates, under a program funded by DOE and EPRI. In 1990, Westinghouse was awarded the design certification contract from DOE and EPRI and the scope was jointly determined for the cost-shared $120M Design Certification Program ($50M from DOE, $22M from EPRI, and $48M from Westinghouse). In March 1993, the companion cost-shared program on First-of-a-Kind Engineering (FOAKE) was awarded to Westinghouse as a result of a market-driven utility selection process. This program, together with the Design Certification Program, will provide the certainty in safety, licensing, cost, and schedule which is needed for public, investor, and utility confidence to proceed with nuclear power. The FOAKE program scope totals $158M ($86M DOE/Advanced Reactors Corporation and $72M Westinghouse).

Westinghouse has already expended $125M on these two essential programs and is providing a major share of the industry cost sharing. In addition, Westinghouse will repay $25M of the DOE funding on design certification as royalties from the sale of the first AP600 plant. Westinghouse has proceeded aggressively with the program and has successfully completed the $13 million test program at Oregon State University and all other design certification testing programs. The results of these test programs have been used successfully to verify the computer programs to evaluate the performance of the AP600. The NRC are currently reviewing our results and they are also using the world-class Oregon test facility for their own research programs.

In FY 1996, Congress approved $40 million for the entire Advanced Light Water Reactor (ALWR) program and DOE allocated $11 million as their share of AP600 design certification costs. This was a $3 million reduction from the amount needed to keep the program on schedule. There was also a substantial increase in the fees from the NRC for its work on approving the design even beyond the amounts on which the FY 1995 and FY 1996 appropriations were based. As a result of the inability to maintain funding levels and the increased NRC fees, the original final design approval target of December 31, 1996 can not be achieved.

The design certification program is now 88 percent complete, and is targeted for final design approval from the NRC by the end of the first quarter in 1997, provided funding levels are maintained.

For FY 1997 out of the total amount appropriated for the ALWR program, $10 million is needed for AP600 design certification. This is less than the FY 1996 appropriation, and it is important to stress that about two-thirds of this amount represents user fees to be paid to the NRC. The balance is essentially the $3 million that was not appropriated in FY 1996.

The ability to market AP600 successfully around the world, particularly in the Asian nations that will place orders for nuclear power plants in the next three years, depends on the timely receipt of final design approval from the NRC. Further delays beyond those that have already resulted from funding shortfalls in FY 1996 will give foreign competitors a crucial advantage and potentially deprive the United States of these very important American labor-intensive orders.

Under the 1992 FOAKE agreement between DOE and the Advanced Reactors Corporation, ARC was to fund and manage FOAKE on two of the advanced reactor designs currently in the design certification process. After a rigorous bid and proposal and market selection process, ARC selected the AP600 as the mid-size plant to receive FOAKE funding. There are several noteworthy and innovative characteristics of this model government-industry program:

- The total FOAKE program for both reactors is $270 million, the majority (63 percent) of which comes from the private sector--utilities and reactor designers.

- ***As directed by Title XXI of the Energy Policy Act of 1992, DOE committed $100 million (37 percent). Under the DOE/ARC cooperative agreement, DOE's contribution will be repaid from revenues received from the sale or licensing of plants or technology developed in this program.***

The AP600 FOAKE program is 52 percent complete, and is on schedule for completion in Fiscal Year 1998, as required under the DOE/ARC agreement. Funding required for FOAKE in FY 1997 is $17 million.

FOAKE is vital to the utility industry's efforts to assure that the nuclear option is preserved, and the DOE/ARC contractual agreement is indicative of the joint commitment. Congress and the Administration have made legislative and contractual commitment to the program, which has two years to completion. . The United States will be repaid for its investment in a successful program while also meeting the economic and energy goals of the Congress, and the Administration.

In summary, for FY 1997, out of the total amount appropriated for the ALWR program, $27 million is requested for the AP600 core program. This core program includes $10 million for AP600 design certification. The FOAKE funding needed is $17 million, which is consistent with the 1993 agreement between DOE, ARC and Westinghouse to assure FOAKE completion on time in FY 1998.

Finally, substantial progress has been made in the AP600 program, and the ALWR program overall, through your support, the full support and cooperation of the utility members of the Advanced Reactors Corporation, the DOE, and the domestic and international members of the AP600 team.

We believe this progress and this program is:

- Vital to the future of nuclear power in America,

- Vital to developing technology exports and jobs for America,

- And necessary to maintain and enhance our influence in international nuclear policy.

Thank you. I will be pleased to answer any questions.

THURSDAY, FEBRUARY 29, 1996.

IDAHO ISSUES

WITNESS

HON. MICHAEL D. CRAPO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF IDAHO

Mr. MYERS. Next we have our colleague from Idaho, Michael Crapo.

Mike, if you would come forward, we would be pleased to here from you. You may proceed for 5 minutes as you like.

Mr. CRAPO. Thank you, Mr. Chairman and members of the committee, I appreciate the chance to again be before you. This is an annual opportunity for me, and I appreciate your courtesies each year as I come to talk to you about issues that are so critical to Idaho. I want to specifically address, as I have in the past, issues relating to the Department of Energy and the facilities at the INEL in Idaho.

As you know, Secretary O'Leary and Acting Secretary Grumbly have stated that they are committed to cleaning up the legacy of the Cold War, a legacy that has often left many DOE sites with a tremendous cleanup burden. Just as we are committed to our veterans, I think we need to be committed to the communities that helped in the Cold War battle.

Significant reductions in work forces at our DOE sites have put the cleanup progress at risk and I am very familiar with the budget restrictions that we face as we try to balance the budget; but, nevertheless, I think that not only Federal law but the obligation that we have to the cleanup of the Cold War legacy requires that this be a priority in our budget-making and decision-making process.

Further, the Department of Energy's Environmental Management Program has a tremendous impact on my State. Recently, as I am sure you are all aware, the State of Idaho entered into an agreement with the Department of Energy and the Navy as a result of court litigation; and this agreement has now been made a part of a court order that the State of Idaho agreed to receive some of the spent nuclear fuel from the Navy and some of the spent nuclear fuel that the Department of Energy has responsibility for handling in return for some commitments that the Department of Energy and the Navy made to advance and enhance the cleanup efforts at the INEL facility. In other words, Idaho did its part.

I might say we had some significant political opposition in the State of Idaho for this. As a result of that, Congress has already taken up this issue and, as you know, there has been a resolution in Congress stating the intent, and I just want to read that to the committee. It says that:

"Congress recognizes the need to implement the terms, conditions, rights and obligations in the settlement agreement referred to," and it gives details, "that effectuates the settlement agreement in accordance with those terms, conditions, rights and obligations.

"It is the sense of Congress that funds requested by the President to carry out this settlement agreement and such consent order should be appropriated for that purpose."

I just make these points to remind the committee of how critical it is to not only meet the obligation that the country has now made in an agreement with the State of Idaho that is enforceable by court order and acknowledged and confirmed by Congress, but also that this committee look at the budget that is made available to the Department of Energy.

I am looking specifically at the environmental management account, which will be necessarily one which the Department has to look to to implement its agreements with the State of Idaho; and although we don't have a request from the President for fiscal year 1997 yet I am requesting that this committee look at at least maintaining that account at its current level.

Again, I recognize the budget problems we face, and I would like to see the committee beef that account up. I think it is one account that deserves beefing up, but at least try to keep it at the current level.

A second issue I would like to briefly discuss with you is that, as we come to face the questions of how to deal with spent fuel in this country, spent nuclear fuel, we are going to face some very serious times as we try to address opening Yucca Mountain, as we try to address the questions of how to deal with the commercial spent fuel as well as the military spent fuel.

There is a project in Idaho that you are aware of. I testified to you about many different aspects of this issue in the past, but there is now a project that is going forth in Idaho, the electrometallurgical treatment research by Argonne National Laboratory that is critical in many contexts, not the least of which is the issue of providing research answers to the management and handling of spent fuel. If we are going to honor the agreement with Idaho and if we are going to find solutions for the treatment of spent fuel, we need to provide this research. This committee has been willing to do that in the past, and I am asking you again to keep that research going.

Last year, the committee authorized $25 million; and I ask that you do that again this year to keep that research moving so we can address these critical issues.

Mr. MYERS. Well, thank you, Mike, for your testimony. We look forward to working with you for the rest of the year on these difficult problems. We are pleased with the cooperation we had last year and look forward to the same this year. Thank you.

[The statement of Mr. Crapo follows:]

MICHAEL D. CRAPO
2D DISTRICT, IDAHO
HOUSE REPUBLICAN LEADERSHIP
103D CLASS LEADER
DEPUTY WHIP
WESTERN UNITED STATES
REPUBLICAN POLICY COMMITTEE
BEEF CAUCUS CO CHAIRMAN
CONGRESSIONAL RURAL CAUCUS
CONGRESSIONAL SPORTSMEN'S CAUCUS
CONGRESSIONAL WATER CAUCUS

Congress of the United States
House of Representatives
Washington, DC 20515–1202

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DEPARTMENT OPERATIONS, NUTRITION, AND FOREIGN AGRICULTURE

TESTIMONY OF THE HONORABLE MICHAEL D. CRAPO of IDAHO BEFORE THE ENERGY AND WATER DEVELOPMENT APPROPRIATIONS SUBCOMMITTEE

FEBRUARY 29, 1996

Mr. Chairman, I thank you and the members of the committee for allowing me the opportunity to testify before your subcommittee today regarding the FY 1997 appropriations. Specifically, I would like to address appropriations for the Department of Energy.

As you know, Secretary O'Leary and acting Undersecretary Grumbly have stated that they are committed to cleaning up the legacy of the cold war, a legacy that has left many DOE sites with a tremendous cleanup burden. Just as we are committed to our veterans, we must also be committed to the communities near these sites that helped win the cold war. Significant reductions in workforces at our DOE sites has put this cleanup progress at risk.

Further, the Department of Energy's Environmental Management Program has a tremendous impact on my state. Recently, the Governor of Idaho, the Department of Energy (DOE), and the United States Navy entered in to an agreement that will provide for the research and interim storage of our nation's Nuclear Navy spent nuclear fuel. In return, the Department of Energy has agreed to clean up the legacy of the Cold War's nuclear weapons production at the Idaho National Engineering Laboratory (INEL) and transport the spent fuel and waste to permanent storage outside of Idaho. Additionally, the Congress has passed the Defense Authorization Conference Report which contains a Sense of the Congress that states:

☐ WASHINGTON, DC
437 CANNON BUILDING
WASHINGTON, DC 20515
(202) 225–5531

☐ 304 NORTH 8th STREET
ROOM 325
BOISE, ID 83702
(208) 334–1953

☐ 2539 CHANNING WAY
SUITE 330
IDAHO FALLS, ID 83404
(208) 523–6701

☐ FEDERAL BUILDING
250 SOUTH 4th, ROOM 220
POCATELLO, ID 83201
(208) 236–6734

☐ 628 BLUE LAKES BLVD., NORTH
TWIN FALLS, ID 83301
(208) 734–7219

> (1) Congress recognizes the need to implement the terms, conditions, rights and obligations contained in the settlement agreement referred to in subsection (a)(1) and the consent order of the United States District Court for the District of Idaho, dated October 17, 1995, that effectuates the settlement agreement in accordance with those terms, conditions, rights, and obligations.
>
> (2) It is the sense of Congress that funds requested by the President to carry out the settlement agreement and such consent order should be appropriated for that purpose.

Adequate appropriations for the Environmental Management account is critical for maintaining this agreement and the workforce to clean up the INEL.

The fiscal year 1995 appropriations contained a significant reduction in the Environmental Management account resulting in a reduction of 1500 contractor employees. The reductions in the fiscal year 1996 appropriations for Environmental Management has thus far led to a further reduction of 56 contractor employees and significant slowdown of cleanup progress.

Although the President's fiscal year 1997 budget request has not yet been completed, it is my request that the Energy and Water Appropriations for Environmental Management for FY97 be at least the level appropriated for fiscal year 1996.

Second, as you are well aware, our nation must soon come to terms with how to handle both commercial and military spent nuclear fuel. In Electrometallurgical Treatment as proposed for Argonne National Laboratory, we have a firm, concrete opportunity to make real progress. This project has come to where it is ready to answer difficult questions and show true results. It should go forward as proposed. I support funding for this project.

This action is necessary to meet the provisions of the waste removal agreement between Governor Batt and the Department of Energy. In order for Experimental Breeder Reactor II fuel to be able to leave the state, it must be treated and prepared for permanent disposal outside of Idaho. Electrometallurgical treatment is necessary for this.

Last year in the FY 96 Energy and Water Appropriations, this committee funded the research of Electometalugical Treatment of spent nuclear fuel conducted by Argonne Labs. I further request that the committee appropriate the same level as fiscal year 1996 of $25 million.

Thank you.

Mr. BEVILL. Thank you, Mike. You have touched on something that is certainly very important to the country. We will be certainly working with you, because you made a very fine presentation and thank you.

Mr. CRAPO. Thank you very much.

Again, I appreciate this committee's courtesies. You are always very kind, and I know you face difficult decisions and I often ask you to do things that are hard to do with the budget restrictions we face, but I appreciate you working with me.

Mr. MYERS. Those problems start and end with money.

Mr. CRAPO. That is right.

THURSDAY, FEBRUARY 29, 1996.

PUBLIC POWER ISSUES

WITNESS

ALAN H. RICHARDSON, EXECUTIVE DIRECTOR, AMERICAN PUBLIC POWER ASSOCIATION

Mr. MYERS. Alan Richardson, Executive Director of the American Public Power Association. Your prepared statement will be placed in the record, and you may proceed as you like.

Mr. RICHARDSON. Thank you, Mr. Chairman. It is a pleasure for me to be back before you again today.

It is a particular pleasure and privilege to join with others who I am sure have commented on your long service to this committee and to Mr. Bevill's long service to this committee, 60 years I guess of collective service to this committee and the Congress and the Nation. I wish I could say we have always agreed, but in most cases we have and, in any case, it has been a pleasure to work with this committee on a bipartisan nature. So thank you very much for allowing me to testify.

Mr. BEVILL. We fight a lot, but we don't let anybody know it.

Mr. RICHARDSON. I wish I could be as focused as some of the other witnesses, but I can't focus on one particular issue because there are a number of issues of interest to the American Public Power Association, 2,000 publicly owned electric utilities that I represent.

Let me first comment, we are, of course, all a little bit at a disadvantage in testifying because the administration hasn't submitted a budget so we have no hard figures to comment on. So my comments have to be of a more general nature than they would otherwise be.

The electric and magnetic fields research is an issue that has been of particular interest. The concerns over the potential health effects of EMF did lead Congress to pass a joint Federal- and non-Federal-funded EMF research program. It is a 5-year program, $65 million appropriated, a cost share of 50-50 with non-Federal entities.

The American Public Power Association and its members last year contributed nearly $750,000 to this effort, and we have continued to maintain our support for this program and hope that it will be funded through the full 5-year period at the authorized amount.

Renewable energy programs we have heard a lot about. I can't match Mr. Sklar's exhibits. I can second his enthusiasm on behalf of the Public Power Association for investments in renewable energy.

There have been reductions in renewable energy expenditures; and we are seeing these occur at the same time that the industry that I represent, the electric utilities, are facing bottom-line constraints which make it more difficult for them to invest in renewable technologies. Yet the money that has been spent by the Department of Energy, as you have heard from other witnesses, has been very well spent; and we are fully supportive of that and hope that that support that has always been exhibited in this committee will continue.

Renewable energy program. A particular interest to Public Power is the Renewable Energy Production Incentive Program. This is a program which provides incentive payments of up to 1.5 cents per kilowatt hour for energy developed through renewable resources that is paid to not-for-profit utilities or electric cooperatives and public power systems, providing symmetry to the tax credits that others get through the Tax Code for their investments in these technologies.

There is another technology in the renewable area that I would like to point out and that is the Advanced Hydropower Turbine Program.

There are hundreds of hydroelectric facilities in this country that are up for relicensing. The technology, of course, of getting power from water is very old, but turbine technology has not advanced. There are programs under way now through the Department of Energy to examine new turbines that will mitigate environmental consequences and also enhance the efficiencies of hydroelectric operations.

Again, this is a cost-shared program. Last year, the DOE invested $1 million; hydropower industry, another $500,000. We see a need for another $15 million this year for phase two of that project and then move into phase three, which will be the actual demonstration of these new technologies.

The storage of high-level nuclear waste. You heard from Mr. Phil Bayne. The American Public Power Association is part of his group, and I fully support and endorse the comments that he made with respect to the necessity of moving forward on interim storage facilities.

Federal Power Marketing Administrations, Corps of Engineers, Bureau of Reclamation, these are issues that are very familiar to all of you on this subcommittee. We appreciate your support for the Federal power program.

There are reports that appropriations for the operation, maintenance and rehabilitation of the hydroelectric facilities at these multipurpose Corps of Engineers and Bureau of Reclamation plants may be decreasing. We think that that is shortsighted, at least until alternatives are found. The funds that are invested in these projects are returned through ratepayer revenues; and of course if maintenance is deferred and projects are allowed to go into disrepair, that means lower power production and that means lower revenues for the Federal Government.

We as customers or representatives of customers recognize that there are budget constraints, and we are looking for alternatives to Federal appropriations to see what we can do to accept some greater responsibility in these areas. But until such time as those programs come to fruition and arrangements can be made, we believe it would be shortsighted to shortchange these programs in the appropriations process.

Finally, the Tennessee Valley Authority, the nonpower programs. Mr. Bevill, of course, has been a great friend of the Tennessee Valley Authority from his constituents in Alabama and throughout the Tennessee Valley.

This committee has historically provided appropriations for the nonpower portions of TVA's programs. These programs are mandated by law, and they provide national benefits like flood control and navigation management and protection of the land and water and wildlife resources. These are separate from PVA's power programs. The power programs are fully funded by the ratepayers.

PVA Chairman Craven Crowell has done an outstanding job in controlling the costs of power and TVA in keeping a lid on rate increases, and he devotes the same attention to the other programs to ensure that Federal funds are wisely spent and kept to a minimum.

Mr. Chairman, that concludes my remarks. Thank you very much again for the opportunity.

Mr. MYERS. Thank you for your very fine testimony. Thank you.

[The statement of Mr. Richardson follows:]

American Public Power Association

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STATEMENT OF ALAN H. RICHARDSON, EXECUTIVE DIRECTOR

AMERICAN PUBLIC POWER ASSOCIATION

BEFORE THE

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT,

HOUSE COMMITTEE ON APPROPRIATIONS

FEBRUARY 29, 1996

Mr. Chairman. Members of the Subcommittee. I am Alan H. Richardson, executive director of the American Public Power Association (APPA). APPA is the national service organization representing the interests of over 2,000 municipal and other state and local government-owned utilities throughout the United States. Collectively, public power utilities deliver electric energy to one of every seven U.S. electric consumers (about 35 million people), serving some of the nation's largest cities. The majority of APPA's member systems are located in small and medium-sized communities in every state except Hawaii.

Let me begin by taking this opportunity to express appreciation on behalf of APPA for the outstanding service of Chairman Myers and Ranking Member and former Chairman Bevill. The loss of 60 years of combined Congressional experience resulting from your decisions to retire truly signals the end of an era in the Congress and on this subcommittee.

Thank you for allowing me to appear to discuss APPA's FY 1997 appropriations priorities. The current situation, including a delay of the Administration's detailed budget documents, makes this a unique year. Rather than commenting, as usual, on the Administration's budget request, my testimony must, by necessity, focus more generally on broad program areas of importance to public power systems.

EMF Research

Electric and magnetic fields (EMF) refers to the electric field caused by voltage and the magnetic field surrounding a current-carrying conductor. Concerns about possible adverse human health effects from EMF exposure have continued since the early 1970s. In response to public questions about EMF, Congress created a new EMF Research and Public Information Dissemination Program (better known as the "EMF RAPID" program) in Section 2118 of the 1992 Energy Policy Act (EPACT). This legislation authorized a five-year, $65 million health-based research effort to determine the effects of EMF, to demonstrate EMF mitigation technologies and to disseminate information to the public. Fifty percent of the funding for this program comes from nonfederal sources including electric utilities, electric equipment manufacturers and other interested parties. APPA's member systems have met their contribution goals for each of the past two appropriations cycles. In 1995, for example, 886 public power systems provided $792,000 in voluntary contributions to EMF RAPID.

EMF RAPID was intended by Congress to be a five-year program that was to begin in FY 1993 and sunset at the end of FY 1997 under the provisions of EPACT, Section 2118. However, because FY 1993 appropriations preceded the signing into law of EPACT, APPA member systems and other interested parties plan to seek a one-year extension of the program through FY 1998. This extension is necessary in order to meet Congress' intent, to complete ongoing research projects and to provide the program the maximum non-federal contributions called for under the law.

APPA believes both the EMF RAPID program and the authorization for the ongoing EMF research program, primarily conducted at DOE labs, are important and merit this subcommittee's continued funding support in FY 1997. In addition, we urge this subcommittee's support of a one-year extension of EMF RAPID.

Renewable Energy Programs

Due to budget constraints, overall funding for DOE renewable programs was reduced by 29 percent in FY 1996. APPA believes it is important to continue development and commercialization of clean, renewable energy resources as we face the prospect of increased competition in the electricity marketplace. A recent study by the Investor Responsibility Research Center (IRRC), an independent, nonprofit firm providing research and analysis on business and public policy issues, shows renewable technologies are growing internationally but are in a "protracted slump" in the United States. Two of the most significant barriers to greater renewable energy use are cost and lack of demonstrated experience. Because of the requirement to supply electricity to customers on demand, with high reliability at a reasonable cost, electric utilities often are conservative when evaluating new technologies. Evolving deregulation, coupled with stable fuel prices, now adds a further challenge to greater adoption of relatively unproved renewable technologies.

We urge this subcommittee's support for DOE's renewable energy programs in FY 1997 in order to ensure that renewable energy technologies remain a part of the full range of resource options available to our nation's electric utilities.

Renewable Energy Production Incentive Program (REPI)

APPA urges this subcommittee's continued support for REPI, also authorized by EPACT in Section 1212. REPI permits DOE to make direct payments to publicly and cooperatively owned electric utilities at the rate of up to 1.5 cents/kWh of electricity generated from solar, wind, certain geothermal and biomass electric projects. Because projects of this nature often require a long lead time for planning and construction it is imperative that stable and predictable funding be provided.

REPI was established to ensure equity between investor-owned utilities who utilize renewable energy tax credit and production payments and publicly and cooperatively owned electric utilities who are unable to do so. DOE recently produced final rules to implement REPI and made the first payments under the program to four state-owned and three municipally-owned facilities. A 1993 APPA member survey indicated that 60 utilities in 32 states are interested in participating in the REPI program.

Production payments to utilities are an excellent market-based method to spur greater interest in renewables. They fit well with DOE's emphasis on market-led commercialization.

Storage for High-Level Nuclear Waste

The Nuclear Waste Policy Act of 1982 requires DOE to construct and operate a permanent storage facility for high-level nuclear waste by 1998. Utility customers already have committed approximately $12 billion to the Nuclear Waste Fund established by the Act.

Despite this fact, in testimony before Congress, DOE estimated a permanent storage facility at Yucca Mountain in Nevada will not be in operation until at least 2010. Many of our nation's 109 nuclear plants will run out of on-site storage capacity long before this target date, resulting in increased costs for new on-site storage facilities or possible power shortages and increased rates due to inadequate storage for spent fuel.

We support funding necessary for creation of an integrated spent fuel program that provides for an interim facility in operation by 1998 and continued progress toward a central permanent storage facility. Funds were reserved in the FY 1996 budget for this purpose. APPA is working with Congress toward accomplishing this goal.

Advanced Hydropower Turbine Program

The Advanced Hydropower Turbine Program is a joint industry/government cost-share effort to develop a new, improved hydroelectric turbine superior in its ability to protect fish and aquatic habitat and operate efficiently over a wide range of flow levels.

During the next decade over 100 hydroelectric projects will seek new licenses from the Federal Energy Regulatory Commission (FERC). Many of these projects were originally licensed over 50 years ago. Newly imposed licensing conditions can cost hydro projects 10 to 15 percent of power generation. A new, improved turbine could help assure any environmental conditions imposed at relicensing in the form of new conditioning, fish passages or reduced flows are not accomplished at the expense of energy production. This is particularly important due to the increasingly competitive electric market in which utilities operate today. Flow levels will affect the economics of each of these projects and many will be unable to compete if the current trend toward flow reductions continues.

The Advanced Hydropower Turbine Program is planned in three phases. We commend Congress for appropriating $1 million to complete Phase One, design development, in FY 1996. The hydropower industry provided $500,000 as its Phase I nonfederal share. APPA joins with others in the hydroelectric industry in requesting the full $15 million required by DOE for Phase Two, model design and testing. This appropriation will enable DOE to move quickly to Phase Three, development of the final prototype, in the next fiscal year, and placement of the prototype in many of the hydroelectric projects which will be up for relicensing after the year 2000.

Federal Power Marketing Administrations (PMAs)

We appreciate this subcommittee's continued support of the federal power program.

Recently, APPA has received reports that substantial reductions in appropriations to PMAs will be recommended by the Administration when its more detailed budget document is released next month. APPA supports increased efficiency in PMA operations. However, we believe Congress also must recognize that federal power sales cover all PMA operating expenses plus all Corps of Engineers and Bureau of Reclamation operations, maintenance, replacement and rehabilitation expenses for hydropower and repayment of the federal investment in the construction of the projects. Power sales also support many nonpower-related expenses associated with these projects. Budget "scoring" rules aside, because the PMAs charge cost-based rates, reducing discretionary appropriations to PMAs actually saves the government nothing. As appropriations are lowered, power rates fall accordingly thus reducing mandatory receipts on the other side of the ledger.

Corps of Engineers and Bureau of Reclamation

More than 500 public power systems purchase power generated at U.S. Army Corps of Engineers and Bureau of Reclamation dams and marketed by the five PMAs. APPA asks this subcommittee's support in assuring adequate appropriations are provided to the Corps and Bureau for operation, maintenance, major rehabilitation, upgrading and replacement of the equipment needed at the powerhouses. Unfortunately, budget realities in the past often have required the Corps and Bureau to defer upgrades and maintenance resulting in efficiency losses affecting hydropower production.

Discussions currently are ongoing in various project areas between customers and the operating agencies seeking alternatives to relieve the stress caused by the spiraling effects of deferred maintenance. We will keep this subcommittee apprised of our progress in this regard and look forward to working with you and the authorizing committees in seeking remedies to increase efficiencies and deal with ongoing maintenance problems.

Bureau of Reclamation Dam Safety Program

APPA asks this subcommittee's continued appropriation for the Bureau of Reclamation's Dam Safety Program. Dams must be operated and maintained in a safe manner. The objective of the Bureau of Reclamation's Dam Safety Program is to quickly identify dams which pose an increased threat to the public and to expedite corrective action decisions and safeguard the public and associated resources.

Tennessee Valley Authority (TVA)

This subcommittee historically has provided funding for TVA's appropriated programs because they provide benefits not only to the TVA region but to the nation as a whole. These funds are separate from the self-financed electric power program and are used to provide navigation, flood control, management and protection of land, water and wildlife resources, business development and job creation.

These TVA programs are part of a national effort to promote sound economic development and to protect our natural resources. Other Federal agencies receive appropriations to carry out similiar programs in other parts of the country . Therefore, the funding you provide for the Tennessee Valley is not special treatment and should be continued.

As you know Mr. Chairman, TVA Chairman Craven Crowell and his colleagues have done an outstanding job of maintaining stable electric rates by skillful management of power revenues and personnel. TVA's appropriated programs are also monitored continuously for efficiencies and effectiveness with the same level of scrutiny that has prepared the power program for a competitive utility industry.

THURSDAY, FEBRUARY 29, 1996.

FUSION PROGRAM

WITNESS

MIKLOS PORKOLAB, DIRECTOR, PLASMA FUSION CENTER, MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Mr. MYERS. Mr. Miklos Porkolab, Director of the Plasma Fusion Center at MIT.

Mr. PORKOLAB. Mr. Chairman and distinguished committee members, I am the director of the MIT Plasma Fusion Center and a professor of physics. I am here today to make three points in regard to fusion research.

First, I wish to urge your support of the recommendations detailed in the recent FEAC report, A Restructured Fusion Energy Sciences Program. This report recommends a more science-oriented fusion program. At the same time, FEAC maintains the U.S. role as a partner in the international fusion energy effort. Given the financial constraints, I firmly believe that the FEAC approach best protects the core values and the science and human resource base of the U.S. fusion program.

In accordance with the FEAC report, I believe that if the 1997 funding were to drop below the $250 million level, it would do irreversible damage to the U.S. fusion program. With this in mind, I would urge that you support adequate funding for a vigorous and effective program in 1997.

Before going further, I would like to make you aware of the impact that last year's budget reduction has already had upon the U.S. fusion program. It has forced us to lay off hundreds of highly trained engineers and scientists, 30 of them at MIT, idling our world class tokamak research facilities for much of the time, including the C-Mod device at MIT, and resulted in the closure of some of our premier university-based plasma research facilities.

Even more troubling for me personally, however, is that I have observed great disillusionment among some of our brightest graduate students about their future. Moreover, we as a community, and I personally, have endured a mixed message of pity and disdain from our international partners who cannot understand our inability to adequately fund this program. The irony is that this is happening at a time of great scientific advancement in our field, both at the national and international level.

Mr. Chairman, in the remaining few minutes I would like to discuss two other important contributions from this program that often have gone unnoticed, and that brings me to my points two and three. This is education and spinoffs. Let me start with education.

In my opinion, the quality of education of young graduate students in plasma fusion physics and technology is unsurpassed by any other branch of fuel or applied science, and our students can compete with the very best in the world as we are nearing the 21st century. This statement is supported by the great breadth and spectrum of ultimate employment opportunities our students enjoy after graduation.

To be specific, out of the 140 Ph.D's that MIT awarded in plasma and fusion physics and technology since 1980, only about 30 ended up working in fusion. About 10 of them are in energy fusion. Approximately 70 Ph.D. candidates found employment in nonfusion type research in both national labs and in private industry, while the remaining ended up working in academia, management and corporate business.

My third point is that, at the same time, plasma research has produced some very important near-term implications. Let me amplify on this.

The use of plasma processing and the development of high performance computer chips is playing a major role in the rapidly growing semiconductor industry. A case in point is two young $50-million-per-year companies growing at 40 percent per year, each one employing over 100 people now, one located in my neighborhood in Burlington, Massachusetts, the other in Los Angeles, California. Common features: Both companies were started up by fusion scientists, one associated with the MIT Plasma Fusion Center and the other with the University of California at Los Angeles. These companies are now becoming major suppliers of plasma etch tools, so-called "fabs," used by the largest semiconductor manufacturers in the world.

One might ask, why the success? Well, the answer is that because of the know-how required to build such equipment is best and perhaps only known to fusion scientists.

Conclusion: Training in fusion science and technology is unique and is transferable to multibillion dollar high-tech business once the market is identified.

Case in point: Recently, South Korea has decided to invest hundreds of millions of dollars to build up a world class fusion program so it will have the trained manpower necessary to operate and equip its planned multibillion dollar chip fabrication facilities in the early 21st century. According to a recent Wall Street Journal article, within 10 to 15 years Korea plans to dominate the world markets by building semiconductor factories, each costing $10 billion.

Finally, my last point, this leads to the conclusion that we have to invest now in training skilled manpower or we will lose out in major world markets in the next century.

Thirdly, at the MIT Plasma Fusion Center, we are exploring other types of plasma technologies with potential huge world markets: remediation of waste treatment using plasma. We are investigating special arc plasma furnace processing technology as a means of vitrifying almost any kind of solid waste and at the same time greatly reducing air pollution relative to incineration.

This specimen is an example of a vitrified waste. It looks like it comes from a volcano and resembles glass that is now bleached.

I do not have time here to discuss many other ideas our scientists are exploring but would be glad to discuss them at a later time. Thank you very much for your interest and attention.

Mr. MYERS. Thank you for your fine testimony. Thank you.

[The statement of Mr. Porkolab follows:]

STATEMENT ON THE MAGNETIC FUSION ENERGY SCIENCES PROGRAM

Miklos Porkolab

Director
Plasma Fusion Center
Massachusetts Institute of Technology

Presented to the Energy and Water Development
Subcommittee on Appropriations

February 29, 1996

SUMMARY:

I wish to urge the Energy and Water Development Subcommittee on Appropriations to accept the recommendations of the January 27, 1996 Report , "A Restructured Fusion Energy Sciences Program", authored by the Fusion Energy Advisory Committee (FEAC). This report recommends a restructuring of the U.S. fusion program into one which focuses on plasma and fusion science and associated technologies, and pursue fusion energy science and technology as a partner in the international effort. I also urge the Subcommittee to accept and support the FEAC recommended funding level to implement this restructuring, which calls for $275M in FY'97, but in any case not less than $250M.

Background Information on the Author

My name is Miklos Porkolab, and I am the Director of the Plasma Fusion Center at the Massachusetts Institute of Technology. I am also a Professor in the Physics Department at MIT, and have been involved in plasma physics and fusion research, as well as educating some of the brightest students in this nation, for nearly 30 years. After receiving my Ph.D. in plasma physics at Stanford University in 1967, I had the privilege of working for 10 years as a research scientist and educator at the Princeton Plasma Physics Laboratory. I am just as proud of having contributed to plasma physics and fusion science research, as well as education for the past 19 years at one of the world's foremost technical universities, the Massachusetts Institute of Technology.

Statement on the Restructured Fusion Energy Sciences Program

I am here today to plead for your support and acceptance of the recommendations detailed in the recent Fusion Energy Advisory Committee Report, **"A Restructured Fusion Energy Sciences Program"**, issued on January 27, 1996. I would also ask that you provide the funding recommended in this report, so that the restructuring of the fusion program can move vigorously forward. As discussed in the FEAC Report, the program will have to be restructured toward a more science oriented program, with the mission of advancing plasma science, fusion science, and fusion technology, while remaining a partner in the international fusion effort. The report also makes it clear that in FY'97 a funding level of $275M would be necessary to move forward briskly with the restructuring effort. It also explains that funding below $250M would prolong the restructuring transition, forcing our international agreements to be renegotiated. **It is my firm belief that funding below the $250M level would do irreversible damage to this program, necessitating further layoffs of hundreds of highly trained scientists and engineers, idling our major experimental facilities, breaking our international agreements, and further damaging the hopes and aspirations of our young scientists and graduate students.**

The impact of the 32% budget reduction for fusion research in FY1996 has been devastating to our research program, demoralizing to our research staff and graduate students, and damaging to the long-term technological competitiveness of the Nation. The consequence of this budget reduction is that the United States has abandoned its historical leadership role in the international effort to provide all the peoples on this planet with inexhaustible, environmentally safe and widely available fusion power, while preserving the precious and minuscule amounts of fossil fuel reserves. As discussed in last year's report on **The U.S. Program of Fusion Energy Research and Development**, prepared in July, 1995 by the **President's Committee of Advisors on Science and Technology (PCAST)**, the only viable long term solution to the world's energy needs is fusion power. The reduction of the fusion budget in FY96 to $244M meant laying-off hundreds of highly trained engineers and scientists, idling our world-class tokamak research facilities and terminating some of the premier university based plasma research facilities. We have observed the disillusionment of some of the brightest graduate students in this country about their future, and endured the mixed pity and disdain from our international partners with regard to our inability to fulfill our agreement on the completion of the ITER EDA project.

It is ironic, indeed, that the drastic reduction of this vital and vibrant research program comes at a time when we are experiencing some of our greatest scientific achievements in the laboratory. The recent exciting discovery of essentially classical confinement regimes in our large tokamak facilities at General Atomics and Princeton University, and the very recent discovery of highly favorable confinement scaling at reduced size in the compact, high power density Alcator C-Mod tokamak at MIT show that we still have a viable and exciting fusion research capability in this country. The combination of these experimental results with the rapid progress in computing capability as well as a greatly improved theoretical understanding, should inspire confidence in our capabilities and assure continued strong funding of this program. I would like to discuss now two important additional aspects of this program, namely **education and spinoffs**.

Educational Aspects of Fusion Science and Technology

Besides having participated in the creation of a brand new branch of a most exciting field of science, namely plasma and fusion physics, I have had the privilege of training some of the best doctoral level graduate students, who are now serving this nation as university professors, as research scientists at national laboratories, NASA, and in private industry, and as engineers and managers in industry and business. I attribute the diversity of my students' occupations to the tremendous breadth of training that plasma physics and fusion science research provides in both scientific and technical areas as well as its emphasis on a "systems approach" in dealing with complex problems. In my opinion this training and education is unsurpassed by any other branch of pure or applied science, and it is among the very best a student can receive as he prepares for the tremendous challenges of a technically competitive 21st Century.

This conclusion is further supported by our recent survey to discover where the MIT Ph.Ds in plasma physics and fusion research have ended up working within a few years of their graduation. While initially most of our graduate students were attracted to the field of plasma science to work on developing the ultimate source of energy for mankind, namely fusion power, in due course their horizons broadened considerably and many of them found challenging employment in non-fusion related fields. Specifically, out of the 140 Ph.Ds that MIT awarded in plasma and fusion physics and technology since 1980, a few years beyond graduation only about 30 ended up working in fusion research (including both magnetic and inertial confinement). Approximately 70 Ph.D. students found employment in non-fusion type research activities in both national laboratories and in private industry, while others ended up working in academia, management and corporate business. I am sure you will agree that these statistics indicate the generally broad training that plasma fusion science provides to future generations of scientists and engineers who will lead this Nation in maintaining its competitiveness in the 21st Century.

To elaborate further on the educational aspect of the fusion program, I would like to take this opportunity to share with you segments of an E-mail message and a letter I received recently from two outstanding MIT Ph.D. graduates, one trained in fusion physics and the other trained in plasma physics. After 5 years of outstanding research work on one of our major tokamaks, the fusion graduate returned to Stanford

University to receive his MBA and is now working at a major "Silicon Valley" computer company in California as a corporate planner. He writes:

"I believe now that "understanding" any type of complex system (plasma, organization, economy, environment, etc.) requires a "systems" approach. In the fusion program, you are training people to have this kind of understanding!!!!! There aren't many people out here in the real world who have it. And without it, it is easy to spin your wheels. People around here continually get frustrated because they try to solve "macro" problems at the "micro" level, and their solutions have no impact".

The recent MIT plasma physics graduate is working now in the greater Los Angeles area at a rapidly growing dynamic young company, originally started up by ex-fusion researchers, which builds and markets fully automated plasma etch tools for use in semiconductor fabrication facilities ("fabs"), writes:

"There is a real parallel between the work which I perform in industry and that which goes on in the world of fusion research. In both cases one is attempting to understand and control fundamental processes which occur within a complicated physical system that rarely allows for isolation and study of individual interactions. And as with fusion research, there is an intimate, dynamic relationship between the engineering and the science. The successful technical person is the one who can determine when careful calculations and experiments are called for (or even possible) and when crude but expedient measures are more appropriate. Because of the difference in "delivery schedule" between fusion reactors and plasma etch tools, industry will tend to favor the "quick and dirty" more frequently than would a fusion experiment, and this manifests the major difference, in my view, between the two endeavors. However, the surprising number of physicists who have left the fusion program and met with success in industry supports the existence of a certain similarity between the two enterprises."

Technology Spinoffs from Fusion

Plasma research has produced important near-term applications. The use of plasma processing in the development of high performance computer chips is playing a major role in the rapidly growing semiconductor industry. Companies such as those described by our recent Ph.D. student, and others in California, Texas and Massachusetts, are growing at an annual rate of 40-50%, and are creating hundreds of new, high-paying jobs. A case in point is a young, fast growing, $30-40M/year company in Massachusetts, started up by former members of the MIT Plasma Fusion Center. Company "X" has become a leading manufacturer of systems and components used in the production of advanced semiconductors, and also chemical vapor deposition (CVD) diamond. Such diamond coatings are used to develop and manufacture tool coatings, optical coatings, substrates for high performance electronics, and bearing seals. This company is but one example of those created by ex-fusion researchers that have become major tool and component suppliers to the largest semiconductor manufacturers world-wide.

As an additional data-point, recently South-Korea has decided to invest hundreds of millions of dollars near-term in building a world-class fusion program, so it will have the trained manpower necessary to equip and operate its planned multi-billion dollar microcircuit chip fabrication facilities. According to a recent Wall Street Journal article, within a decade Korea plans to dominate the world markets by building semiconductor facilities, each costing $10 Billion. The useful lifetime of such plants is expected to be only 3 years! We must conclude that investment **now** into plasma sciences and technologies will be key to maintaining our lead in cutting-edge semiconductor technologies (and hence **quality jobs**) in the 21st Century.

Another example of a growth industry being aided by plasma technology is the development of plasma-assisted flat plate display windows for computers, large TV screens, etc. Just last month a foreign owned manufacturer operating in the New England area hired away one of our senior physicist in the MIT Plasma Fusion Center to manage an R&D group working on developing such display windows. The US can ill-afford losing such experts to our foreign competitors in new technologies; at the very least, we must maintain a vigorous training program to replenish the inevitable turnover of critical personnel in such selected areas.

At the MIT Plasma Fusion Center we are also performing research in a new area which could have major applications in the relatively near term: environmental technology applications of plasmas. Using plasmas provides substantial advantages over conventional environmental technologies because they can be easily controlled and can operate over a wide range of temperatures. One area that we are exploring is the use of plasmas for treatment of waste. We are investigating special arc plasma furnace processing technology as a means of vitrifying almost any kind of solid waste and greatly reducing air pollution relative to incineration. We are also developing new environmental monitoring techniques and related technologies. In another program we are using "cold plasma" processing to selectively destroy dilute concentrations of contaminants in gaseous waste streams. Our experimental research has shown promising prospects for commercialization.

Very recently we have also initiated a program to investigate the use of plasma fuel convertor devices to convert hydro-carbon fuels into hydrogen-rich gas. The hydrogen-rich gas can be used in fuel cells and in internal combustion engines to provide power with greatly reduced air pollution. While this work is at a relatively early stage of development, it may contribute to the goal of reducing pollution from automobiles. We hope that our research can provide the basis for new areas of industrial development as well as improving the environment.

Summary

In summary, I would like to urge the distinguished Energy and Water Development Subcommittee on Appropriations of the United States Congress: Please accept the recommendations of the FEAC report of January 27, 1996, "A Restructured Fusion Energy Sciences Program", and provide the recommended funding necessary to carry out the restructuring of the U.S. fusion program. I sincerely believe that these recommendations are in the Nation's best long term interests.

THURSDAY, FEBRUARY 29, 1996.

RENEWABLE AND NUCLEAR ENERGY PROGRAMS

WITNESS

MATTHEW FREEDMAN, ENERGY POLICY ANALYST, PUBLIC CITIZEN

Mr. MYERS. Mr. Freedman, we have about four minutes before we have to go vote. Would you like to do it when we come back after the vote or would you like to come back at 5 minutes until 2:00?

Mr. FREEDMAN. In 10 minutes would be fine.

[Recess.]

Mr. MYERS. We apologize for the delay we forced upon you.

Mr. FREEDMAN. That is okay, Mr. Chairman.

Mr. MYERS. I am sorry for that, but we have responsibilities over there, too, of course. We appreciate your understanding and patience.

Mr. FREEDMAN. No problem.

Mr. MYERS. We are pleased to hear from you now.

Mr. FREEDMAN. Mr. Chairman, I thank you for the opportunity to testify today for Public Citizen on the fiscal year 1997 Energy and Water Development Appropriations bill. I ask that my full written statement be included in the record.

Mr. MYERS. Your statement will be in the record, and you may proceed as you would like.

Mr. FREEDMAN. Government supported research and development for renewable energy technologies represents a major success story and will continue to play an important role through the 1990s. Programs administered by the Department of Energy over the last several years have led to lower capital and operating costs, improvements in reliability and the sustained growth of a domestic renewable energy industry.

Thirty percent reductions in renewable energy research and development for fiscal year 1996 made by this committee were excessive and unwarranted. Public Citizen supports restoring funding to fiscal year 1995 enacted levels of $340 million for solar and renewables and an additional $51 million for electric energy systems, storage, policy and management.

Solar energy technologies are poised to grow substantially over the next decade. For photovoltaics, Federal research has brought down module cost from over $6 a watt in 1991 to under $4.50 a watt today. Though DOE's programs to improve manufacturing technologies have yielded impressive results, more needs to be done on thin film research and development, on working with manufacturers through the PV Manufacturing Technology program and by deploying photovoltaics collaboratively with utilities in the PV–COMPACT program.

Solar hot water systems today provide enough energy to supply the water heating needs of about 1.8 million households. The Federal solar hot water program is directed towards cost-shared initiatives with the solar industry and potential end users to help the industry attract private capital and scale up manufacturing, achieve economies of scale and lower production costs.

Other important DOE solar research includes the development of central receiver plants, or "power towers", like the Solar Two project in the California desert and work on the dish-engine program, a highly leveraged private sector effort to develop new modular, cost-effective systems that can be used to generate solar electricity.

Since the early 1980s, the cost of wind-generated electricity has dropped by more than 80 percent and new utility-scale wind projects are being built for as low as 3.9 cents a kilowatt hour. Existing wind projects comprise almost 1,750 megawatts and satisfy electricity needs of almost 300,000 households.

With continued DOE support, costs are projected to drop to as low as 2.5 cents per kilowatt hour by the year 2000 for sites with good wind resources. DOE's applied research in aerodynamics, blade design, fatigue damage prediction and structural reliability at the National Renewable Energy Laboratory and Sandia National Laboratory will help the wind industry to reach this goal.

Another key element of DOE's effort includes the next-generation wind turbine program to develop and test larger turbines for both domestic and export markets.

DOE's support of geothermal energy has helped to lower costs from 12 cents a kilowatt hour to less than 6 cents a kilowatt hour today with more than 2,100 megawatts of installed capacity in the United States. Despite growth in the number of geothermal projects and declining costs, domestic companies need further assistance to move forward and compete with the low prices of fossil fuels at home and competition from foreign companies in overseas markets.

DOE needs to do more research and development on new drilling technologies and on mapping subsurface variations in geology and geochemistry. Also important is DOE's support for direct use geothermal applications and collaborative deployment efforts for geothermal heat pumps.

Biomass energy technologies are poised to provide major benefits to the Nation in the coming decade as well. Developments in DOE's biofuels research will allow the use of cellulostic biomass for ethanol production. Research on whole tree burning, advanced gasifiers and advanced biogas turbines will help bioenergy to successfully compete in cogeneration markets. Biogas utilization efforts at DOE are also of critical importance and tie in with programs under the Climate Change Action Plan to reduce methane emissions. In particular, Public Citizen urges that priority be given to DOE's regional biomass energy programs. The regional programs work with industry across the country to deploy cost-effective technologies and provide a vital link between the research community and users of these emerging technologies.

Public Citizen also urges this committee not to renew support in fiscal year 1997 for DOE's Advanced Lightwater Reactor Program, which funds collaboration with the Advanced Reactor Corporation to design, engineer and obtain regulatory approval for a new generation of evolutionary nuclear reactor designs. Between fiscal year 1992 and 1996, DOE has provided over $275 million to this consortium. The ALWR program should be complete at the end of fiscal year 1996 when DOE's contract with the Advanced Reactor Corporation for first-of-a-kind engineering expires and the two lead designs receive final design certification from the Nuclear Regulatory Commission.

Continuing the ALWR program would violate authorization of the Energy Policy Act which explicitly states that design certification support should only be provided for designs that "can be certified by the Nuclear Regulatory Commission by no later than the end of fiscal year 1996."

Chairman Myers, during last year's Floor debate on an amendment to terminate this program, you yourself recognized this issue and expressed concern that "it would be a terrible mistake today for our government to renege in the commitment of the fifth year of a 5-year contract when we already have four years invested." Based on these comments, I assume that you would not support the sixth year of a 5-year program.

After almost 5 decades of development and government support and over $47 billion in real terms spent on the development of nuclear fusion technology, we feel that it is time for this industry to fend for itself in the marketplace.

Additional concerns that we have with the pyroprocessing programs, fusion and radioactive waste are also included in the written testimony.

Mr. MYERS. Thank you very much for your testimony. Again, we apologize for the long delay and are sorry the other Members have other meetings during the noon hour. Thank you very much for your testimony.

Mr. FREEDMAN. That is quite all right, Mr. Chairman.

Mr. MYERS. Thank you.

[The statement of Mr. Freedman follows:]

Mr. MYERS. The committee will stand adjourned until 2:00 p.m. today.

TESTIMONY OF

MATTHEW FREEDMAN

ENERGY POLICY ANALYST

PUBLIC CITIZEN'S CRITICAL MASS ENERGY PROJECT

TO THE

HOUSE APPROPRIATIONS COMMITTEE

ENERGY AND WATER SUBCOMMITTEE

FEBRUARY 28, 1996

Mr. Chairman and members of the Subcommittee, I thank you for the opportunity to testify today for Public Citizen on the fiscal year 1997 Energy and Water Development Appropriations bill. I ask that my full written statement be included in the record.

Renewable Energy

Government supported research and development for renewable energy technologies represents a major success story and will continue to play an important role through the 1990s. Programs administered by the Department of Energy over the last several years have led to lower capital and operating costs, improvements in reliability and the sustained growth of a domestic renewable energy industry.

Thirty percent reductions in renewable energy research and development for fiscal year 1996 made by this committee were excessive and unwarranted. Public Citizen supports restoring funding to fiscal year 1995 enacted levels of $340 million for solar and renewables and an additional $51 million for electric energy systems, storage, policy and management.

Solar Technologies

Solar energy technologies are poised to grow substantially in the next decade. For photovoltaics, federal research has brought module costs from over $6.00/watt in 1991 to below $4.50/watt today. Though DOE's programs to improve manufacturing technologies have yielded impressive results, more needs to be done on thin film technology research, on working with manufacturers through the PV Manufacturing Technology (PVMaT) program and by deploying photovoltaics collaboratively with utilities in the PV-COMPACT program.

Solar hot water systems today provide enough energy to supply the water heating needs of almost 1.8 million households. The federal solar hot water program is directed toward cost-shared initiatives with the solar industry and potential end users to help the industry attract private capital and scale up manufacturing, achieve economies of scale and lower production costs.

Other important DOE solar research includes the development of central receiver plants, or "power towers", like the Solar Two project in the California desert and work on the dish-engine program, a highly leveraged public-private sector effort to develop new modular, cost-effective systems that can be used to generate solar electricity.

Wind Energy

Since the early 1980s, the cost of wind-generated electricity has dropped by more than 80 percent and new utility-scale wind projects are being built for as low as 3.9 cents/kWh. Existing wind projects comprise almost 1,750 MW and satisfy the electricity needs of almost 300,000 households.

With continued DOE support, costs are projected to drop to as low as 2.5 cents/kWh by the year 2000 for sites with good wind resources. DOE's applied research in aerodynamics, blade design, fatigue damage prediction and structural reliability at the National Renewable Energy

Laboratory and Sandia National Laboratory will help the wind industry to reach this goal. Another key element of DOE's effort includes the next-generation wind turbine program to develop and test larger turbines for both domestic and export markets.

Geothermal Technologies
DOE's support of geothermal energy has helped to lower costs from 12 cents/kWh in 1980 to less than 6 cents/kWh today with more than 2,100 megawatts of installed capacity in the United States. Despite growth in the number of geothermal projects and declining costs, domestic companies need further assistance to move forward and compete with the low prices of fossil fuels at home and competition from foreign companies in overseas markets.

DOE needs to do more research and development on new drilling technologies and on mapping subsurface variations in geology and geochemistry. Also important is DOE's support of direct use geothermal applications and collaborative deployment efforts for geothermal heat pumps.

Biomass Technologies
Biomass energy programs are poised to provide major benefits to the nation in the coming decade. Developments in DOE's biofuels research will allow the use of cellulostic biomass for ethanol production. Research on whole tree burning, advanced gasifiers and advanced biogas turbines will help bioenergy to successfully compete in cogeneration markets. Biogas utilization efforts at DOE are also of critical importance and tie in with efforts under the Climate Change Action Plan to reduce methane emissions. In particular, Public Citizen urges that priority be given to DOE's regional biomass energy programs. The regional programs work with industry across the country to deploy cost-effective biomass energy systems and provide a vital link between the research community and users of emerging technologies.

Nuclear Energy
Public Citizen urges this Committee not to renew support in FY97 for DOE's Advanced Light Water Reactor Program, which funds collaboration with the Advanced Reactor Corporation to design, engineer and obtain regulatory approval for new evolutionary nuclear reactors. Between FY1992-96, DOE has provided over $275 million to this consortium. The ALWR program should be complete at the end of fiscal year 1996 when DOE's contract with the Advanced Reactor Corporation for First-of-a-kind engineering expires and the two lead designs receive final design certification from the Nuclear Regulatory Commission.

Continuing the ALWR program would violate authorization from the Energy Policy Act explicitly stating that design certification support should only be provided for designs that "can be certified by the [Nuclear Regulatory] Commission by no later than the end of fiscal year 1996."

Chairman Myers, during last year's floor debate on an amendment to terminate this program, you recognized this issue and expressed concern that "it would be a terrible mistake today for our government to renege on the commitment of the fifth year of a five year contract when we already have four years invested." Based on these comments, I assume that you would not support the sixth year of a five year program.

Contrary to the intent of the Energy Policy Act, the reactors developed under the Advanced Light Water Reactor program will not be built in the United States. No new nuclear orders have been placed since 1978, and this year's survey of utility CEOs performed by the Washington International Energy Group found that 89% said that their company would never consider ordering a nuclear power plant and only 8% believed that there would ever be a resurgence of nuclear power. As of today, not one utility or company participating in this program has committed to building a new reactor in this country.

Even the Nuclear Energy Institute (NEI) realizes that there are no domestic markets for new reactors. In a letter to members of Congress last year, they admitted that "the ALWRs are prime candidates for orders in Southeast Asia." NEI's newsletter Nuclear Energy Insight wrote that "all three [ALWR] designers see their most immediate opportunities for selling their designs in Pacific Rim countries." In fact, the first commercial General Electric ABWR, a design supported under "first-of-a-kind-engineering", began operation in Japan earlier this year. Asea Brown Boveri's System 80+, another ALWR design, has already been offered to the Taiwan Power Company in response to their international bid specification.

Perhaps the most egregious aspect of the ALWR program is support for design certification approval from the US Nuclear Regulatory Commission. This regulatory subsidy is quite astonishing -- one government agency paying for another agency's licensing fees on behalf of General Electric, Westinghouse and Asea Brown Boveri. These companies should bring new products to market and pursue regulatory approval without any additional taxpayer subsidies.

After almost five decades of government support and over $47 billion in real terms spent on the development of nuclear power technology, it is time for this industry to fend for itself in the marketplace.

Pyroprocessing

Last year, this committee created a new, unauthorized program and provided $25 million for plutonium pyroprocessing at Argonne National Laboratory that exceeded the Administration's own request for support. I urge the committee to reconsider and terminate efforts to develop advanced nuclear fuel reprocessing technologies.

The pyroprocessing program is an outgrowth of work on the Advanced Liquid Metal Reactor, a nuclear breeder technology terminated by Congress in 1994. The pyroprocessing program has no support from DOE's own office of Environmental Management, the only possible customer for the technology. In a May 4, 1995 DOE memorandum, Howard Canter, Technical Director of the Office of Fissile Materials Disposition, wrote that "[the office of Environmental Management] indicates that its preference is not to use this technology." Additionally, a 1995 National Academy of Sciences study on plutonium disposition raises serious questions about the utility of continuing this program and states that "[pyroprocessing] has several disadvantages that the panel believes effectively rule it out as a serious competitor for the near-term plutonium disposition mission." Furthermore, the NAS study found that pyroprocessing technology "could be redirected to produce material with nuclear detonation capability."

Continuing work on pyroprocessing will only increase waste management problems, encourage other emerging nuclear nations to reprocess spent nuclear fuel and spur the growth of international commerce in weapons-grade nuclear materials.

We urge the committee to eliminate funding for all pyroprocessing activities.

Fusion

DOE's fusion energy program consists primarily of three operating tokamak reactors and plans, at this point, to build the $2.2 billion Tokamak Physics Experiment and participate in the $13 billion International Thermonuclear Experimental Reactor with Russia, Europe, and Japan. We ask the committee to scale back funding for the fusion energy program to less than $200 million in fiscal year 1997 and urge DOE to shift existing funds towards alternative fusion research efforts that do not include the use of tokamaks. These efforts currently receive less than 3% of the fusion budget.

Current fusion energy research leads to a technology which, even if successfully developed, will be plagued by problems that make it an unlikely candidate for commercial electricity production. Studies by the Lawrence Livermore and Los Alamos National Laboratories cite concerns about future tokamaks that range from enormous costs, complexity, unreliability and radioactive waste production. In fact, the Electric Power Research Institute estimates that deuterium-tritium tokamak reactors would generate more radioactive waste than the proposed Advanced Light Water fission reactors. Given the current problems with handling and storing these dangerous wastes, it is inadvisable to pursue a technology that would generate more when alternatives are readily available.

Radioactive Waste Policy

Last year, Congress drastically cut funding for the Department of Energy's high-level waste program, which is currently studying Yucca Mountain in Nevada as a potential permanent repository for the nation's irradiated reactor fuel. For FY 1996, the program received $315 million, with an additional $85 million fenced off for centralized interim storage activities should authorizing legislation pass. In contrast, the program received $522 million in FY 95.

Because of the manner in which Yucca Mountain was designated as the only candidate for a permanent repository and specific technical problems with the site itself, Public Citizen has long opposed the Yucca Mountain program and supports terminating appropriations for the project. With billions already spent, the final price tag on a Yucca Mountain repository could exceed $30 billion. For this reason, the Yucca Mountain project was on the list of economically wasteful and environmentally destructive government programs targeted by the "Green Scissors" coalition of environmental and taxpayer groups.

Ending the program now is especially sensible if Congress does not intend to fully fund the Department of Energy's activities at Yucca Mountain. Even before last year's cuts, the program was under fire for planning to defer collection of important data until after an expected site suitability decision in 1998. Because of the FY 96 cuts, however, DOE is now only anticipating a more modest determination of the site's "viability" in 1998. Curtailments like these only hamper efforts to build public confidence in a beleaguered enterprise that historically has failed to earn it. Such trust is essential if the nation is going to irrevocably commit to the notion of a permanent geologic storage of high-level waste. If the money to undertake full scientific studies is not there, Congress should pull the plug once and for all.

If, however, Congress elects to continue the Yucca Mountain program, the state of Nevada is entitled to full funding for oversight activities. Nevada never asked to be the nuclear industry's dumping ground, and the state has a right to keep a watchful eye on the DOE program. Since the need to do so stems from a congressional decision, full federal funding is appropriate.

Regardless of your decision on proper funding levels, one thing that Congress should not do is use the appropriations process to mandate the construction, in Nevada or elsewhere, of a centralized "interim" storage facility for high-level nuclear waste. Centralized interim storage is a flawed concept, and forcing a nuclear waste dump on Nevada would run counter to the letter and spirit of the Nuclear Waste Policy Act of 1982 as amended (NWPA). Last year a similar effort failed in the face of opposition from both President Clinton and Speaker Gingrich.

Even if centralized interim storage were a good idea, the appropriations process would not be the place to alter the nation's nuclear waste policy in so radical a manner. Appropriations and authorizations proceed on differing tracks for good reason. Authorizing committees in both bodies have held hearings on legislation to revise the NWPA, and the House effort, H.R. 1020, has cleared the committee process. If Congress is resolved to rewrite the NWPA, the authorization process is the proper arena for the effort.

While legislating from appropriations bills is poor public policy, singling out Nevada as the host for an interim nuclear waste dump makes a mockery out of this Congress' purported commitment to extend greater authority to the states. A genuine commitment to state sovereignty is best gauged by action, not rhetoric. Few actions could be more contrary to the principle of state authority than compelling a state that does not have any nuclear reactors to serve as the dumping ground for those that do.

Forcing interim storage on Nevada now would also override sensible provisions in current law. While targeting Nevada as the only candidate for a permanent repository, the 1987 amendments to NWPA contain critical protections for the state that should be preserved.

First of all, current law prohibits the placement of an interim storage facility in Nevada. This provision is essential to ensuring the integrity of the studies at Yucca Mountain, which could be politically compromised if high-level waste is shipped to Nevada before a decision is made on Yucca Mountain's suitability as a repository. Preventing the premature dumping on Nevada is especially important in light of the curtailed plans for site study.

If Yucca Mountain is not a viable repository site, there is no reason to ship the nation's waste to a state as far from the majority of operating reactors as Nevada. If Yucca Mountain is indeed a viable site for a repository, the studies that make the final decision must not be biased by the presence of high-level waste just down the road.

NWPA also forbids the building of centralized interim storage until a license for a permanent facility has been granted. Eliminating this clause creates the possibility that a so-called interim facility could become a *de facto* permanent site, albeit without the protections that a permanent facility would have. Last year's budget cuts and a tight fiscal picture make it especially likely that funding for interim storage will come at the expense of long-term plans.

To be sure, centralized interim storage of high-level nuclear waste is a bad idea in and of itself. No one has ever presented a public safety rationale for centralizing storage at this stage. An interim facility does nothing to reduce the number of high-level waste sites, as every operating reactor will remain a waste site so long as it continues to split atoms. Centralized interim storage, moreover, may create the false impression that the high-level waste problem has been solved, thus stalling the search for a permanent solution.

Finally, centralizing storage in the near term without a long-range plan will expose millions of citizens to the risks of waste transportation for no reason. Forty-three states will likely bear the burden of the largest nuclear waste transportation enterprise in history. Over 95 percent of all of the nation's waste radioactivity would hit the roads and rails, exposing millions of citizens to unwarranted risk.

THURSDAY, FEBRUARY 29, 1996.

BIOMASS PROGRAM

WITNESS

MEGAN S. SMITH, EXECUTIVE DIRECTOR, AMERICAN BIOFUELS ASSOCIATION

Mr. MYERS. The committee will come to order.

We are going to make some adjustments in the schedule here. Congressman Fazio wanted to be here for the first witness, so we are going to skip that one, with the permission of the witness, if that is okay. He would like to be here.

Mr. SANFORD. That is fine.

Mr. MYERS. The first witness we will invite is Megan Smith, the Executive Director of the American Biofuels Association.

Megan, we are pleased to have you again. Your prepared statement will be placed in the record and you may proceed for 5 minutes as you would like. You brought some corn.

Ms. SMITH. Yes, I did.

Mr. MYERS. I tried to think of the word the other day, parch. Have you ever had parch corn?

Ms. SMITH. No, I have not.

Mr. MYERS. That is an old Indian name. You take an iron skillet and take the kernels out. It doesn't pop, it parches. Another farmer and I were trying to think of what the word was and all we could think of was scorch. I'm sorry.

Ms. SMITH. This is actually brought to you by La Colline. It was hanging on their wall, so I brought it from lunch.

Mr. MYERS. Do you have to take it back for their supper?

Ms. SMITH. Eventually, yes, for supper.

Mr. Chairman and distinguished members of the subcommittee, thank you for allowing me this opportunity to testify on behalf of the members of the American Biofuels Association, of which I, Megan Smith, am Executive Director.

The U.S. needs desperately to develop a national energy policy which includes alternatives to foreign oil for transportation, weaning us from our dependence on OPEC nations so that we do not once again put ourselves in a precarious position, ending up in another Persian Gulf war where American lives are lost over oil. A domestic industry producing biomass ethanol could be realized at a small cost to the U.S. taxpayer, a job creating and rural development industry which would actually help decrease the trade deficit through reduction of foreign oil imports.

What is biomass? Biomass is any matter composed of lignocellose. Examples includes wood, grasses, agriculture residue, and municipal solid waste.

The benefits of bioethanol are many and are good for America.

Benefit number 1. Bioethanol can help the current ethanol industry increase capacity. The current ethanol industry converts to ethanol only part of the available biomass, i.e., the starch inside the corn kernel itself. DOE is currently testing the conversion of the corn cob and stalk and biomass fiber, which is the whole of the kernel that lodges in one's teeth while eating popcorn. They are hoping to increase the output of New Energy Company of Indiana's ethanol plant on upwards of 15 percent of existing capacity.

Benefits number 2, 3 and 4. Bioethanol can help eliminate municipal solid waste, agriculture, and forestry revenues. Many landfills are turning away waste only to find there are few other disposal options. California's Committee on Alternatives to Rice Straw Burning has determined the conversion of rice straw to ethanol as one of the few viable options. In addition, yard and orchard trimmings and pecan shells may in the future actually acquire value, increasing farm income.

Bioethanol can help make forests safer and healthier, and improve lumber mill economics. Forest fires stemming from immense fuel loading have severely threatened human life and property. Last year during a hearing of this subcommittee, Congressman Riggs asked DOE to investigate conversion of forestry wastes to an energy source. Since that time, DOE's National Renewable Energy Laboratory has been working closely with several lumber companies in California, i.e., Pacific Lumber and Louisiana Pacific, to investigate the potential for conversion of sawmill residues to bioethanol. Preliminary results look very promising.

Number 5. Bioethanol can help diversify farmers' crop base. Future crops like fast-growing trees and tall grasses will encourage sustainable agriculture, rural economic development and production of a clean transportation fuel while decreasing farmers' against dependency on current crop subsidies.

Number 6, bioethanol can improve biomass power economics. California has recently lost almost one-third of its capacity supplied by biomass power plants. Yet there is an abundance of feedstock available, including 70 percent of forest timber sales aimed at fueling these power plants. A bioethanol plant generates enough energy from biomass' lignin component to actually operate the plant and still have excess electricity left over for the grid. It is, therefore, likely that coupling a bioethanol plant to these power plants may keep some of them operating through improved economics.

Number 7. Bioethanol is so clean that you can drink it right out of the production tank.

Mr. MYERS. You actually brought some.

Ms. SMITH. Yes, I did.

Sorry, it is not working. I got just a little there for a taste. It is just water. It is D.C. water, though. I will clean that up later.

Mr. RIGGS. I didn't notice her swallow, though.

Ms. SMITH. It spilled on the table.

Number 8. Bioethanol is based on sound economics. Two recent laboratory breakthroughs are promising to bring the cost of bioethanol down another 15 cents a gallon. In addition, if the feedstock is low-cost or free, like rice straw or timber residue, the cost drops even closer to the goal of being competitive with gasoline. And the best news is that DOE's bioethanol cost projections are not based on government subsidies.

We need to ensure that monies previously allocated for this program are not wasted. I, therefore, respectfully request that the biochemical conversion category be allocated $31 million, which includes commercialization efforts.

As you have heard, bioethanol is a win-win situation all around, having both short- and long-term implications.

I would like to take this opportunity to publicly commend Mr. Myers and Mr. Bevill for their outstanding service to the American people. Thank you, members of the subcommittee, for allowing me to speak.

Mr. MYERS. Well, thank you for the very nice—we cannot wash it down with anything, but thank you for the nice words and thank you for your testimony.

[The statement of Ms. Smith follows:]

TESTIMONY

OF

MEGAN SMITH

EXECUTIVE DIRECTOR

OF

THE AMERICAN BIOFUELS ASSOCIATION

BEFORE

THE HOUSE APPROPRIATIONS SUBCOMMITTEE

ON ENERGY AND WATER DEVELOPMENT

February 29, 1996

BIOMASS ETHANOL
FOR FUTURE FUELS

Introduction

Mr. Chairman and distinguished members of the subcommittee, thank you for allowing me this opportunity to testify on behalf of the members of the American Biofuels Association, of which I am Executive Director. The United States is at a critical time for the development of alternative fuels for transportation -- biomass ethanol is a domestically produced fuel which could be realized at a small cost to the US taxpayer. I hereby respectfully request that the Department of Energy's Biochemical Conversion program be allocated $31,000,000 in FY97. The ongoing deliberations over deficit reduction and the upcoming elections make it easy to lose sight of other important issues such as alternative transportation fuels. However, the United States urgently needs to develop a national energy policy which includes alternatives to foreign oil for transportation, weaning us from our dependency on OPEC nations with their uncertain futures while building our technological base so that we may continue leading the world in scientific advances. While the DOE's biomass ethanol program has many long-term benefits using dedicated energy crops, in the short-term the US could eliminate many troublesome waste products across our Nation using this promising technology.

Background

What is biomass? Biomass is any matter composed of the three components cellulose (a 6-carbon sugar), hemicellulose (a 5-carbon sugar) and lignin (the "glue" holding these two sugars together). Examples include wood, grasses, agriculture residues and municipal solid waste. The current corn ethanol industry converts to ethanol only part of the available biomass in the corn plant, i.e., the starch in the corn kernel itself. The remainder of the kernel is converted to products such as animal feed, corn oil and corn syrup. While the USDA recently determined that today's ethanol plants have increased production efficiencies to reflect a net energy gain of 25%, DOE's new technology for biomass conversion to ethanol (or bioethanol) could increase efficiencies for corn ethanol plants even further. As an example, DOE is currently testing the conversion of the biomass fiber (or the hard covering of the corn kernel) and corn stover (cob and corn stalk) through a Cooperative Research and Development Agreement (CRADA) between the New Energy Company of Indiana, a large ethanol plant, and the National Renewable Energy Laboratory (NREL). Predicted efficiency improvements from these additional conversions are on upwards of 15% for New Energy's current ethanol capacity.

Benefits

The conversion of biomass to ethanol as an alternative transportation fuel is a win-win situation. In addition to using supplementary portions of the corn plant, bioethanol can use other feedstocks such as waste, many of which are troublesome to the environment and communities nationwide.

For example, many areas of the United States have become extremely burdened with solid waste disposal, causing landfills to turn away waste only to find there are few other disposal options. In California, even simple refuse such as yard trimmings is piling up at a high rate of speed; this debris could also be converted into ethanol. And one extreme example: New York state has an enormous pile of old wooden pallets just outside of Manhattan which could supply enough feedstock to support a 100 million gallons per year ethanol plant. This is a tremendous figure, considering the total ethanol production of the US currently stands at 1.5 billion gallons a year.

As Congressman Fazio knows all too well, agriculture residues in states such as California have also increased the burden on landfill sites. For example, California's legislature has mandated the phase-out of rice straw burning by farmers at a rate of 10% reduction per year; the current phase-out rate stands at 50%. California also has legislation in place disallowing 50% of municipalities' solid waste going to landfill sites. As a result, the rice farmers have been forced to find an alternative disposal system for their crop residue that is being turned away from landfills. The California legislature appointed a Committee on Alternatives to Rice Straw Burning which has determined conversion of the rice straw to ethanol as one of the few viable options. Other agriculture residues such as orchard trimmings and pecan shells are being turned away from landfill sites as well. Although this refuse is a detriment today, it may in the future actually acquire value, increasing farmers' income.

As another example, forest fires stemming from immense fuel loading (fuel composed of dead/diseased trees and underbrush on the forest floor) have severely threatened human life and property, particularly in Western states such as California, Oregon and Washington. Last year during a hearing of this subcommittee, Congressman Riggs asked DOE to investigate conversion of forestry wastes to an energy source. Since that time, DOE's National Renewable Energy Laboratory has been working closely with the timber and lumber industry in California to investigate the potential for conversion of sawmill and forest residues to bioethanol; preliminary results from the composition analysis of mill samples sent to NREL look very promising. Not only does this technology have the potential to keep our forests safe and healthy, but it may also help improve the economics of existing lumber mills.

As you know, Congress is now deliberating the role of agriculture subsidies. Therefore, diversification of farm crops is critical for future year production. Eventually, crops like fast growing trees (e.g., poplars) and tall grasses (e.g., switchgrass) will encourage both sustainable agriculture and clean transportation fuel production for the United States. Production of dedicated energy crops and use of bioethanol reduces the net release of CO2 by 90% or more, helping to reduce greenhouse gas emissions significantly. Few other options are available to the transportation sector to achieve this reduction.

Economics

The cost of bioethanol has dropped from $4.63 a gallon (in 1990 dollars) in 1980 to $1.22 a gallon in 1993. This cost is based on a feedstock price of $42 a dry ton. Two DOE/NREL breakthroughs during the past year are promising to bring this cost down another $0.15 a gallon.

In addition, if the feedstock is low-cost or free, i.e., rice straw or timber residue, the cost of bioethanol from these feedstocks is close to being competitive with gasoline prices today. The best news is that *the cost projections for bioethanol are not based on government subsidies.* While this emerging industry needs the incentives currently in place to facilitate rapid development and deployment of the technology, the ultimate goal of the DOE bioethanol program is to be self-supporting, not relying on government subsidies.

This Congress needs to continue funding bioethanol research in order to bring this promising and maturing technology to fruition, and to ensure that monies previously allocated for this program not be wasted. I therefore respectfully request that the Biochemical Conversion category be allocated $31,000,000 plus $6,000,000 for Feedstock Development for a total of $37,000,000 for Biofuels Transportation. In addition, funding for commercialization projects should be allocated in such a way as to not hurt the basic research program. At this funding level, the United States will be on the road towards production of a sustainable and clean fuel for the future, lessening our dependency on foreign oil. We must not again put ourselves in a precarious position, ending up in another Persian Gulf War where American lives were lost over oil.

The promising technology of bioethanol is at a critical juncture. Therefore, it is imperative that both research and commercialization efforts be funded to the greatest possible level to avoid the "Valley of Death", an end many taxpayer-funded technologies have met in the past.

Emissions

As you know, there has been much controversy over the emissions of ethanol. However, the emissions debate only considered ethanol blended with gasoline at 10%, also known as "gasohol", which received an undeserved reputation due to negative campaigning on the part of ethanol adversaries. The truth is that the emission of concern (VOCs) is at its worst at this blending ratio, but even at this blend it is better than traditional petroleum products. Ethanol blended at percentages higher than 22% is as clean or cleaner than any other fuel on the market today -- this makes bioethanol exceptional and environmentally beneficial. In addition, ethanol's ether ETBE is one of the cleanest oxygenates available today.

Several states are currently deliberating the definition of a "zero-emission vehicle" or ZEV. A car powered by an ethanol-fed fuel cell is a true ZEV, emitting essentially no emissions at all. The California Air Resources Board is therefore considering this type of ZEV for future use in their state.

Today's Status

The DOE and NREL have been working closely with state agencies and a wide-range of industrial partners to accelerate the advancement of this new technology. DOE and NREL have been working with California's Energy Commission, Air Resources Board, and the Department of Food and Agriculture to study the wide possibilities of California producing its own domestic biomass ethanol to curb toxic transportation emissions while at the same time stimulating their economy. Of special interest, the Los Angeles Transit Authority has recently converted part of their methanol bus fleet to ethanol due to corrosion and engine problems using methanol as a fuel.

The DOE intends to have its first bioethanol plant in the ground and operational before 2000. A contract was recently signed between the DOE and the Town of Gridley, California, to conduct a feasibility study for the siting of a bioethanol plant using both rice straw and wood wastes as feedstocks. The front end of this plant will be adaptable, allowing for testing a variety of feedstocks. One possibility in siting this plant is to couple it to an existing biomass power plant. As you know, many biomass power plants went out of business in past recent years due to Standard Offer 4 (SO4) contracts stemming from PURPA legislation. California has lost 250 MW of its 880 MW capacity supplied by these plants. A bioethanol plant possesses enough BTUs from the biomass' lignin component to actually operate the plant and still have excess electricity leftover for the grid. It is therefore likely that coupling a biomass ethanol plant to these existing power plants will improve their economics, keeping some of these power plants operational.

Conclusion

As you can see, conversion of biomass to ethanol is a win-win situation all around, having both short- and long-term implications. Here are just a few examples of the benefits:

-- Bioethanol can help clean up our air as it is a non-petroleum based alternative transportation fuel.

-- Bioethanol can help the existing grain ethanol industry increase their energy output efficiency.

-- Bioethanol can help the future farmer through sustainable agriculture and energy crop production, providing an alternative to reliance on agriculture subsidies.

-- Bioethanol can help the agriculture community by converting its troublesome agriculture wastes to fuel while increasing farm income.

-- Bioethanol can help control forest fires and improve forest health by alleviating fuel loading in our forests.

-- Bioethanol can help improve the economics of lumber, pulp and paper, and paper recycling mills.

-- Bioethanol can help rid municipal solid waste of its biomass fraction.

-- Bioethanol can help improve the economics of biomass power plants, keeping them in business.

-- Bioethanol can help initiate a new-wealth industry with major economic and job creating multipliers. (My colleague, Bill Holmberg, also of the American Biofuels Industry will be submitting written testimony on this important dimension.)

And most importantly:

-- Bioethanol can help wean the United States from its foreign oil dependency and strengthen our nation's competitive edge by producing a domestic fuel from our own resources.

Thank you, Mr. Chairman and members of this subcommittee, for allowing me to speak on the many benefits of bioethanol for a cleaner and stronger nation for future generations to come.

Mr. MYERS. Let me ask this question now. Are there any witnesses who are coming on later this afternoon? In about 15 minutes now we will begin to run behind schedule. Is anyone catching a flight so that we can adjust further? If you will work with the staff, we will try to work it out. If you are going to catch a flight later this afternoon, we will probably finish around 4:30, but we are going to run about 15 to 20 minutes late because we have two votes coming up now, and the last one will only be for 5 minutes but there is no way we can keep the committee going.

THURSDAY, FEBRUARY 29, 1996.

BIOFUELS PROGRAM

WITNESS

GARY ELLIOTT, PRESIDENT, NATIONAL BIOENERGY INDUSTRIES ASSOCIATION

Mr. MYERS. The next witness will be Gary Elliott, President of the National BioEnergy Industries Association. Gary, you are next. Your prepared statement will be placed in the record, and you may proceed as you care for the next 5 minutes.

Mr. ELLIOTT. Thank you, Mr. Chairman and distinguished panel members, for allowing me to speak here today.

I am Gary Elliott, President of the National BioEnergy Industries Association. I am also president of a small engineering consulting company that consults in bioenergy areas. That is the way I make my money. The BioEnergy Industries Association is pro bono, volunteer, work.

I would like to read into the record today some information I have regarding our recommendations for the budget for 1997. The National BioEnergy Industries Association, or NBIA, as it is often known, is the national trade organization of the biomass electric and thermal components, suppliers, manufacturers, and project developers.

We recommend a fiscal year 1997 funding level of approximately 12 percent higher than in the fiscal year 1996 appropriations. That would bring the total to about $29.85 million in the budget, which in direct conformity with the fiscal year 1996 appropriations Floor language, would be equally funded for the biofuels program, which we heard good testimony just previous to mine. So, hence, NBIA supports an overall budget of $59.7 million for the entire bioenergy budget.

Some background why we think this is important.

The World Resources Institute study, A New Power Base for Renewable Energy Policies for the Nineties and Beyond says it all. Biomass contributed 3.1 quads of energy, but the economically accessible resource is 14 quads of energy per year in the United States alone. The report further references carbon emissions from electric generation with fossil plants as ranging from 484 metric tons per gigawatt hour compared to sustainable harvested wood, which is a negative 159.9 metric tons per gigawatt hour due to the carbon sequestration value of biomass.

The 1991 Congressional Office of Technology Assessment report entitled Energy Technology Choices: Shaping Our Future relates that the energy potential of biomass energy is 55 quads by the year 2000 and present capacity is over 14 quads, or over 15 percent of our current 85 quads of the U.S. energy use. At 9 tons per acre, the use of 192 million acres of potential cropland could generate 26 quads of biomass energy. Currently, over 900 million acres are classified as crop or commercial forestland and of that total, 10 percent is withheld from production for soil conservation purposes.

NBIA agrees with the DOE's national biomass power five-year plan, fiscal year 1994 through 1998, which characterizes the U.S. biomass power's contribution of 6,500 megawatts that results in 66,000 jobs with the realistic potential for the industry to provide an additional 44,000 megawatts by 2010. NBIA also believes that with U.S. Government assistance, biomass power could reach $3.5 billion per year in income supporting 120,000 jobs by the year 2000, generating more than $890 million in Federal and State tax revenues with economic growth geographically dispersed.

In conclusion, I would say NBIA believes that direct-combustion biomass has the biggest megawatt deployment potential, in the shortest time period, creating the most geographically dispersed jobs of any alternative energy option. Biomass power developed on a sustainable basis can sequester more carbon than any energy option and be more easily integrated into conventional energy facilities at less cost than any other energy option.

As charts that I have enclosed illustrate from NBIA's 1993 issue of Biologue magazine, the economic development potential is tremendous. Our industries ask the subcommittee to support the administration's fiscal year 1997 budget recommendations in line with NBIA's request. The economic and environmental returns on this investment will be swift and sure. Thank you.

Mr. MYERS. Thank you.

[The statement of Mr. Elliott follows:]

NATIONAL
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ASSOCIATION

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TESTIMONY

by

GARY ELLIOTT
PRESIDENT
NATIONAL BIOENERGY INDUSTRIES
ASSOCIATION

submitted to the

SUBCOMMITTEE ON ENERGY & WATER
DEVELOPMENT
HOUSE APPROPRIATIONS COMMITTEE
U.S. HOUSE OF REPRESENTATIVES

WASHINGTON, D.C.
FEBRUARY 29, 1996

The National BioEnergy Industries Association (NBIA), the national trade organization of the biomass-electric and thermal component suppliers, manufacturers, and project developers recommends an FY'97 funding level approximately 12% higher than the FY'96 appropriated bioenergy budget at the U.S. Department of Energy. NBIA recommends that a DOE Bioenergy-Electric $29.85 million budget which, in direct conformity with the FY'96 appropations floor language, would equally fund programs in Bioenergy/Biofuels. Hence, NBIA supports an overall $59.70 million for the entire bioenergy budget.

The World Resources Institute study "A New Power Base: Renewable Energy Policies for the Nineties and Beyond" says it all: using 1990 statistics biomass contributed 3.1 quads of energy, but the economically accessible resource is 14 quads of energy per year. The report further references carbon emissions from electric generation with fossil plants ranging from 484 metric tons per GWh compared to sustainable harvested wood at -159.9 metric tons per GWh (net) due to the carbon sequestration value of biomass.

The 1992 study released by Johansson, Kelly, Reddy and Williams as fodder for the UN Global Warming meeting in Rio, noted that biomass energy accounted for 14.7 percent of the world's energy. Under the biomass potential review, the study shows that nearly ten percent of the world's energy use could be sustainably harvested from crop, forest, and manure residues, 31.2 exajoules of a total of 373 exajoules worldwide. If sustainable biomass was grown on plantations, the potential would be 266.9 exajoules, or in other words, the globe could rely on sustainable biomass for its primary energy supply.

In the April 1992 Congressional Office of Technology Assessment Study, "Fueling Development: Energy Technologies for Developing Countries," 35 percent of the developing world uses biomass energy, mostly inefficiently. Bringing on more efficient combustion technology could more than double the energy output of biomass energy where 65 percent of the world's population resides.

The 1991 Congressional Office of Technology Assessment (OTA) report entitled "Energy Technology Choices: Shaping Our Future," relates that the energy potential of biomass energy is 55 quads by the year 2000 and present capacity (excluding cultivated crops and wood not used for biomass) is 14 quads, or over 15 percent of our current 85 quads of U.S. energy use. OTA quotes Oak Ridge National Laboratory (ORNL) data which states that during the next 25 years annual crop yields are expected to average between 5-11 dry tons per acre. At 9 tons per acre, the use of 192 million acres of potential crop land could generate 26 quads of biomass energy. Currently, over 900 million acres are classified as crop land or commercial forest land and of that total, ten percent is withheld from production for soil conservation. An average of 328 million acres are planted annually.

The 1992 U.S. Environmental Protection Agency study, "Renewable Electric Generation: An Assessment of Air Pollution and Prevention Potential" (researched primarily by Cathy Zoi and Marc Chupka, both presently at the White House Office of Environment) calculates that 3 quads of biomass energy is currently used for heat and steam generation and 0.5 quads represents 5,427 megawatts of electricity generated. EPA estimates that short rotation woody crops could yield an additional quad of electricity by the year 2000 and 3.5 quads of energy by 2010 without negative environmental impacts.

In a 1994 study by the World Bank, "Renewable Energy Technologies: A Review of the Status and Costs of Selected Technologies" by Kulsum Ahmed reviews that biomass cost history. The study shows that for plants over 20 megawatts, costs could drop from $1,599 dollars per kilowatt hour to $870 per kilowatt hour by the year 2000 with advanced biomass integrated gasifiers tied to steam injected turbines.

NBIA agrees with DOE's National Biomass Power Five Year Plan FY'94-FY'98, which characterizes the U.S. biomass power's contribution of 6,500 megawatts that results in 66,000 jobs with the realistic potential for the industry to provide an additional 44,000 megawatts by 2010. NBIA also believes that with U.S. government assistance, biomass power could reach $3.5 billion per year in income supporting 120,000 jobs by the year 2000, generating more than $890 million in federal and state tax revenues with economic growth geographically dispersed.

Biomass power is an important investment and biomass power can meet the common objectives to dramatically re-industrialize the United States with environmentally benign technology deployment.

NBIA'S FY'97 DOE BUDGET RECOMMENDATIONS FOR BIOENERGY

Bioenergy/Bioelectric FY'95 - '97

	FY'95 Actual	**FY'96 Estimated**	**FY'97 NBIA**
Utility Biomass:			
• Conversion	$2.1	$1.8	$2.25
• Systems	10.0	16.7	17.0
• Cap Equipment	0.0	0.10	0.10
Transportation Sector: • Feedstock Development	$4.0**	$4.0**	$5.0*
Technical Financial Assistance • Regional Biomass Energy Programs	$4.0**	$4.0**	$5.50*
TOTAL REQUEST	$20.1	$26.6	$29.85

** - Regional Biomass Energy Programs and the Feedstock Development Program were solely funded out of the biofuels RD&D program, not electric, during FY'95 and '96.

* - Regional Biomass Energy Programs and the Feedstock Development Program equally shared between the Bioenergy/Biofuels RD&D program and Bioenergy-Electric Programs.

Conversion

The goal of this program is to enhance conversion efficiencies of the different set of direct-combustion biomass applications which includes ways to characterize and lessen emissions and ash. To this end, cost-shared validation tests of steam injected turbines, hot gas clean-up systems, test burns for ash deposition alleviation, and feedstock preparation are essential. NBIA urges an increase of $450,000 for this program, and a dollar-for-dollar requirement for cost-shared collaboration with the biomass combustion industry in enhancing existing commercial technologies.

Systems Development

NBIA strongly supports this program as part of the Energy Policy Act of 1992 implementation as well as the Climate Change Action Plan.

NBIA believes these funds should be directed in dollar-for-dollar cost-shared projects with industry with the following breakdown:

1. Whole Tree Energy: $3.5 million for the first installment of a multi-year project with the existing consortium to operationalize the first Whole Tree Energy facility. This project can leverage large-scale biomass power plants which increase efficiency, meet emissions requirements, and lowers harvesting and feedstocks preparation costs of traditional plants.

2. Advanced Combustion Initiative: $7.5 million for cost-shared validation of existing advanced combustion technology which has immediate market impact including companies in position to manufacture and utility or other endusers ready to purchase upon successful validation of performance.

3. Wood/Coal Cofiring: $1.5 million competitively cost-shared in at least five projects where a project would establish sustainable biomass markets tied to both existing feedstocks, wood/agricultural wastes, and dedicated crops.

4. Agricultural Revitalization: $2.0 million to utilize existing sites whether it be sugar production, rice hulls or peanut shells, or other feedstocks to insure the increase use of biomass production to make food production more competitive which could include the production of other products such as ethanol.

The basis of this program is dollar-for-dollar cost-shared deployment with our industry and the enduser. NBIA plans to work with DOE, the United BioEnergy Commercialization Association (UBECA) and others to insure this program is realistic and effective.

Feedstock Development

NBIA has aggressively supported the program administered by the Oak Ridge National Laboratories (ORNL). The Biofuels Feedstock Development Program (supporting short-rotation woody and herbaceous energy feedstock research) is an essential ingredient for a sustainable biomass power industry as well as a sustainable liquid fuels industry in the United States. NBIA proposes the program ought to be raised to $6 million for a $2 million increase as a cost-shared activity with farmers and woodlot owners as a way to build sustainable dedicated crops tied to existing or new biomass combustion plants on conservation reserve, forestland (including National Parks and Interior lands) so as to institutionalize the use of this emerging resource.

Regional Biomass Energy Programs

NBIA believes that the Regional Biomass Energy Programs are the most effective technology transfer program supported by DOE, and they are essential to meet the goals of the Biomass Power Five Year Plan. To this end, NBIA believes an increase to $6 million of which some funding ought to be provided regionally and on a cost-shared basis with industry for project feasibility studies as a way to provide the initial "due diligence" to begin an aggressive project development cycle in the United States.

Other Programs

NBIA believes that several other programs under the Energy Efficiency and Renewable Energy Section of the U.S. Department of Energy are worth support. The Committee on Renewable Energy Commerce and Trade (CORECT) supported by the International program has been a critical factor in our expanding world markets. NBIA, as a member of the renewable energy trade consortium (the U.S. Export Council for Renewable Energy or US/ECRE) recommends an enhanced level for project identification, prefeasibility assistance through the International Fund for Renewable Energy and Energy Efficiency (IFREE), and multilateral assistance via IFREE, FINESSE and related multilateral bank programs. Funding should be no less than $6.5 million with the international line item equally distributed between CORECT, America's 21st Century and Joint Implementation.

Conclusion

NBIA believes that direct-combustion biomass has the biggest megawatt deployment potential, in the shortest time period, creating the most geographically dispersed jobs of any alternative energy option. Biomass power developed on a sustainable basis can sequester more carbon than any energy option and be more easily integrated with conventional energy facilities at less cost than any other energy option. As the following charts illustrate, from NBIA's 1993 issue of *Biologue* magazine, the economic development potential is great. Our industries ask the Subcommittee to support the Administration's FY'97 budget recommendations in line with NBIA's request. The economic and environmental returns on this investment will be swift and sure.

Thank you.

FIG 1 PROJECTED ANNUAL U.S. EMPLOYMENT IMPACTS

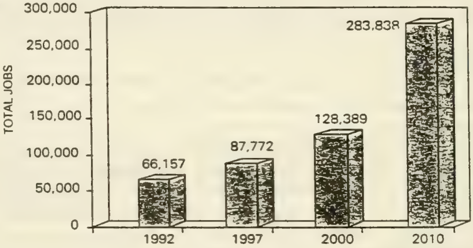

FIG 2 PROJECTED ANNUAL NET INCOME FOR U.S.

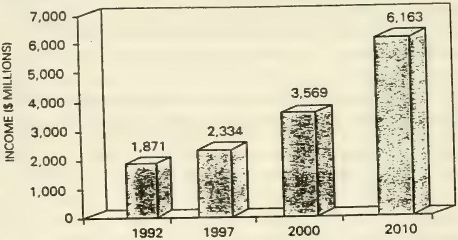

Table 1 - Projections for 1995
Annual Biofuels-Related Job Creation
Great Lakes Region

	Low-Growth Scenario	High-Growth Scenario
Agriculture	5,980	7,100
Agriculture & Forestry Services	1,420	1,690
Logging	2,860	2,440
Chemicals	580	690
Primary Metals	1,370	1,850
Fabricated Metal Products	4,600	6,490
Industrial Machinery	1,830	2,290
Transportation	2,790	3,340
Wholesale & Retail Trade	3,760	4,300
Repair & Maintenance Services	460	470
Total Jobs	25,650	30,660

*Source: Council of Great Lakes Governors (CGLG), "Biomass Resources: Generating Jobs and Energy," prepared for the Great Lakes Regional Biomass Energy Program, November 1985, p. 5.

Table 2 - Industry Wood Energy
Direct Jobs & Income by Employment Category (1985)
Northeast Region

Job/Income Category	Number of Jobs	Total Income (1985 $'s)
Whole-Tree Chipping Operatives	488	$9.3 million
Chip & Mill Residue Truckers	213	$3.7 million
Boiler Operators	443	$10.6 million
Co-Generation System Engineers	264	$3.6 million
Fuelwood Handlers	194	$2.2 million
Foresters	30	$0.4 million
Wood Power Plant Personnel	162	$2.3 million
Stumpage Fees		$1.7 million
Before Tax Profit of Chipping Firms		$12.2 million
	1,794	$46 million

Table 3 - Residential Wood Energy
Direct Jobs & Income by Employment Category (1985)
Northeast Region

Job/Income Category	Number of Jobs	Total Income
Loggers & Firewood Dealers	6,672	$76.1 million
Truckers	2,497	$30.3 million
Chimney Sweeps & Appliance Installers	2,352	$35.2 million
Foresters	103	$1.4 million
Clerical Support Staff	44	$0.4 million
Stumpage Fees		$25.3 million
Before Tax Profit of Chipping Firms		$81.9 million
	11,668	$250.6 million

*Source: CONEG, p. 8.

Table 4 - Conventional Fuels Displaced
Residential/Industrial Wood Energy Use
Northeast Region

Fuel	Amount Displaced	Cost
Oil	1 billion gallons	989 million gallons
Natural Gas & Propane	37 million tcf	340 million
Coal	138,000 tons	9.5 million
Electricity	1,858 million kWh	1.4 million
		$1,944.9 million

*Source: CONEG.

Table 5 - Estimated Economic Impact of Wood Fuels 1992

	Residential Wood Combustion		Industrial Wood Combustion	
	Jobs	Income (millions of $'s)	Jobs	Income (millions of $'s)
Southeast	64,334	$1,553	78,362	$1,150
Great Lakes	50,593	1,222	62,990	920
West	21,174	512	24,919	363
Northwest	10,305	248	11,755	173
Northeast	62,461	1,509	27,393	622
TOTAL	208,867	$5,044	205,419	$3,228

THURSDAY, FEBRUARY 29, 1996.

ADVANCED PHOTON SOURCE AND SCIENTIFIC FACILITIES INITIATIVES

WITNESS

DAVID E. MONCTON, ASSOCIATE LABORATORY DIRECTOR, ARGONNE NATIONAL LABORATORY

Mr. MYERS. David Moncton is associate laboratory director at Argonne.

Your entire statement will be placed in the record, and if you could keep it to 5 minutes, too, because we are due for a vote any time now.

Mr. MONCTON. Well, thanks for inviting me to testify.

I am David Moncton, the associate lab director at Argonne. I am responsible for the Advanced Photon Source, and I wanted to begin by thanking the committee, and particularly the chairman and Congressman Bevill, for the support that both of you have provided to the APS project since construction began in 1989.

We are going to have our dedication on the 1st of May, and we remember fondly your participation in our ground-breaking ceremony back in June of 1989 and hope you will be able to join us for the dedication. The project is almost a year ahead of schedule and under budget.

Mr. MYERS. Good.

Mr. MONCTON. I am pleased to be able to report that success to you and to give you the credit that you all deserve here for providing the funding on the plan that was originally established back in 1987. So within a few percent each year, we were able to receive the plan funding levels, and that helped enormously in being able to bring this project in on time and on budget. Not every project has had that fate, as you well know, and I recommend it as a model for future project funding and congratulate the committee for being able to deliver on that.

Mr. MYERS. Thank you and congratulations.

Mr. MONCTON. I want to say a little about the Scientific Facilities Initiative, a program launched in fiscal year 1996 to provide adequate operating support for a variety of DOE's basic energy sciences facilities, including neutron and synchrotron facilities, electron and microscopy facilities, and some others.

That program has involved the addition of nearly $60 million to the operating budget. That is about 20 percent of the total operating budget that those facilities receive, but it is almost double the effectiveness of those facilities.

For example, at the Advanced Light Source, recently completed facilities in the Berkeley Laboratory, they were able to increase their hours of operations by 71 percent over the fiscal year 1995 level due to that initiative in fiscal year 1996.

The High Flux Beam Reactor at Brookhaven would only have operated at 46 percent of its potential if it were not for the scientific facilities initiative. But as a result, it will operate at a full schedule of 270 days and do approximately twice the number of experiments that they would otherwise have been able to do.

These facilities have large fixed-to-variable cost ratios, and so small increments of money make an enormous difference in their effectiveness. So the community is very, very pleased that those monies were provided in fiscal year 1996, and is planning to run fully again in 1997, as the Department will be submitting follow-on funds for that initiative in 1997 and then hopes that that money will be included in the base program for BES, and we will have a set of very important facilities running with full efficiency in the system.

So that is another good news story that I want to congratulate this committee for its role in helping to provide that funding.

I would like to end by calling your attention to an area within the facilities community that is of concern to us, and that is with respect to the development of new neutron sources, new and upgraded neutron sources. We have not made a major investment in new neutron-scattering facilities in 25 years in this country, and we desperately need to do that, and I would just encourage the committee to give consideration to the Department's program when it comes before this committee this budget year and next.

The Department, I believe, is planning right now, along with OSTP and OMB, to attempt to upgrade a number of existing facilities and plan new ones after the cancellation of the Advanced Neutron Source at Oak Ridge. So I would just encourage the committee to look favorably on that question and request and thank you very much.

[The statement of Mr. Moncton follows:]

Testimony Before the

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT OF THE HOUSE COMMITTEE ON APPROPRIATIONS U.S. HOUSE OF REPRESENTATIVES

by

David E. Moncton
Associate Laboratory Director
Advanced Photon Source
Argonne National Laboratory

February 29, 1996

Mr. Chairman and Members of the Subcommittee:

Thank you for this opportunity to testify on behalf of continued funding for the Department of Energy's Scientific Facilities Initiative. As the Associate Laboratory Director for the Advanced Photon Source at Argonne National Laboratory, I would like to take a moment and thank this committee, and Representatives Myers and Bevill in particular, for the outstanding support given to the APS Project during its construction.

Under the stewardship of this committee, the DOE Office of Basic Energy Sciences has funded the APS at essentially the planned level since project inception in 1989. As a result of that steady support, the Project team was able to design, test, and procure several hundred thousand complex technical components according to plan, and install those components inside new buildings finished in time to receive them. Project management could schedule manpower needs in accordance with technical requirements, and fill those needs in a timely fashion. Consequently, the APS Project has completed the commissioning process within budget and ahead of schedule. The APS has met all DOE milestones and operational goals. We expect that record to continue through our remaining milestones until full operations begin this spring. Users coming to the APS from more than 140 industries, universities, and federal research laboratories are investing $160 million in beamlines and associated research apparatus with confidence that the APS will be ready to provide them with x-ray beams of unprecedented brilliance. Additional support has been provided by the DOE In-House Energy Management Program, which is underwriting construction of a thermal energy storage system for the APS chilled water plant. This enterprise will reduce APS operating costs by more than $5.8 million over the life of the project. We hope that the support enjoyed by the APS, and the positive results of that support, can serve as model for future DOE projects.

The relationship between adequate funding and excellent science is also clear if one looks at how the Scientific Facilities Initiative has impacted the national research facilities funded by the BES and operated by the DOE national laboratories. Every year, thousands of scientists and engineers from academia, industry, and government research institutions come to these neutron and synchrotron radiation light sources, and electron microscopy centers, because of their unique capabilities, which cannot be found in the home laboratories of the investigators. In fact, many of these innovative, state-of-the-art facilities have no counterpart in other countries. They have proven to be important national resources. The scientific inquiries pursued at BES research facilities span a remarkable variety of disciplines. The results of those inquiries have been essential to our knowledge of the complex structures of the materials that underlie our technologies, and the intricate biological processes that govern our lives. The return on federal investment in these facilities has been evident in the fields of industrial, medical, environmental, and energy research, among many others.

In FY 1996, the Scientific Facilities Initiative was proposed and subsequently funded by the DOE Office of Basic Energy Sciences with the support of this committee. By providing supplemental support to BES user facilities, the Initiative acknowledged the importance of these facilities to our nation's scientific infrastructure.

At the same time, implementation of the SFI recognized that, in recent years, budgetary constraints have limited the service these facilities can provide to their scientific customers. There is a large ratio of fixed-to-variable costs at these facilities. Relatively small budget decreases have had significant negative impacts on operations, maintenance, and improvements.

Prior to FY 1996, and in spite of each institution's best efforts at cost cutting, all of the BES facilities found it necessary to substantially reduce user support. This in turn led to a decrease in experimental efficiency. All of the facilities were forced to put off maintenance and improvements needed to increase overall effectiveness — and therefore cost effectiveness — significantly. And four of these facilities (ALS, IPNS, LANSCE, and SSRL) were unable to operate for enough hours to meet user requests.

Thanks to the FY 1996 Scientific Facilities Initiative, BES user facilities have begun to recover lost ground. Reading the complete list of benefits from SFI funding would require more time than I have today, but I will be delighted to make such a list available to the committee. For now, allow me to present some highlights:

The Advanced Light Source, which produces the world's most brilliant long-wavelength x-ray beams, has used SFI funding to increase hours of user operations 71% over the FY 1995 level. They have added to user support staff in the critical areas of beamline technology. They will bring a new device for magnetic spectroscopy on dilute samples into operation a year sooner than would have otherwise been possible. A new insertion device will relieve overcrowding on one of their undulators and make possible a new program in condensed-matter physics.

Running time at the Electron Microscopy Center in FY 1997 will extend by 50%. More researchers will be able to use the EMC for atomic-level studies of changes in material structure and chemistry, and equipment upgrades will lead to better data. Additional scientific and technical staff will enhance user support, identify and train new users, and develop programs and methodologies beyond those currently available.

The High Flux Beam Reactor is a world-class facility for the use of neutron scattering techniques in chemistry, biology, and solid state and nuclear physics. At the FY 1995 funding level, the HFBR would have operated at only 46% of potential. SFI funds will make possible a full operating schedule of 270 days. Because the number of experiments conducted is directly proportional to the number of operating days, about half of the 300 or more experiments that will be carried out this year would not have been possible without the Initiative. The FY 1996 monies have also supported two scientists and one technician to assist users in experiments at the neutron reflectometer and powder diffractometer. To date, this has meant 48 experiments by 27 researchers that would not have been possible without the SFI.

The SFI is having a significant impact on user operations and research productivity at the High Flux Isotope Reactor. This facility produces one of the world's highest steady-state neutron fluxes for medical, industrial, and research isotope production, as well as neutron scattering and activation experiments. Additional staff for user and facility support has increased research time by 20% for the first four months of FY 1996 compared to the same period last year. SFI support has also enabled progress in readying installation of a high-performance cold source at HFIR. This cold source, as bright or brighter than the best cold source at the Institut Laue-Langevin in France, will provide unsurpassed beams for neutron scattering research on complex materials, polymers, and biological systems.

SFI funding is now the entire Energy Research contribution to operation of the Manuel Lujan Jr. Neutron Scattering Center at Los Alamos National Laboratory. Initiative monies supplement Department of Defense program funds and support the proton beam delivery system, the target/moderator system that produces epithermal and thermal neutrons, and the instruments for the national user program. The Lujan Center increased its operating time from 0 hours during the first quarter of FY95 to 1107 hours the first quarter of FY96. They plan to run an additional 1300 hours in the last quarter of FY96, compared to 860 hours in the last quarter of FY95. Loss of SFI funds in FY97 could put an end to operations. The SFI has also contributed to detector improvements, which will significantly increase data collection and detector reliability.

As a result of the SFI, the Stanford Synchrotron Radiation Laboratory will see its scheduled operations time grow by 46%, going from 6 months of operation to about 9 months, with the remaining 3 months used for beamline installation and accelerator improvements. Approximately 20 new staff members are being hired to ensure good user support, as well as instrumentation and accelerator maintenance and improvement. A significant upgrade of experimental control and data acquisition computers is well under way. The resulting increases in capacity are enabling users to make more effective use of beam time. Initiative funding has also been used to begin a significant upgrade of the SSRL computer network.

The National Synchrotron Light Source operated a full schedule of approximately 9 months prior to the SFI, and has shown little elasticity in its operating schedule with budget fluctuations. The shortfalls have, however, caused the NSLS to defer several badly needed upgrades for the storage rings and the beamline instrumentation. Also, user support was very limited. During the first quarter of FY96, and for the remainder of the year, NSLS was able to apply operations funding to the installation of four extra FELs to support the user program. During the December shutdown, new front ends for infrared ports were installed. Because of the SFI, expansion of infrared capabilities are continuing, and early in calendar 1996, new technical staff were added for the infrared area.

SFI monies allocated to the Intense Pulsed Neutron Source in FY 1996 will double annual operating hours, from 16 weeks to 32 weeks, over the next two years. More than 3,000 experiments have been carried out at IPNS since 1981. They have resulted in a form of superconductor that earned three patents for General Electric Company, new strategies for extracting more oil from existing fields, and studies aimed at developing a composite material for the manufacture of passenger aircraft that can travel at twice the speed of sound. Some of the IPNS experiments made possible by SFI support in FY96 are giving us a greater understanding of the physical and chemical structure of coal in order to improve our utilization of this resource. Resources provided by the Initiative are being used to enhance and support existing neutron spectrometers and develop new spectrometers for the future. IPNS has also hired nine additional scientific staff, including five post-doctoral candidates, in support of a full-scale user program, with more hires to come.

This all adds up to clear evidence that the Scientific Facilities Initiative has been a godsend for the BES user facilities. It is my pleasure to express our appreciation for this Committee's support of the SFI last year. At the same time, it is my responsibility to point out that the gains made in FY96 will be lost unless you fully fund the Initiative in FY97. In fact, we hope that you will make the SFI a part of the BES base program.

I would like to close by commenting on our national neutron source program, which is in particular need of this committee's attention. While operating funds for existing sources are being made available, all of these facilities are decades old and lagging well behind our international competition. The next challenge is to upgrade our existing neutron facilities, and build new sources to revitalize the program.

Previous federal investments in these facilities have certainly paid off. For instance, neutron scattering experiments, which were recognized in a recent U.S. Nobel Prize, have given us essentially all of our information on the fundamental structure of magnetic materials. These materials are critical components of motors and generators, as well as telecommunications, audio, and video equipment, all of which have become essential to our economy and, indeed, our everyday lives. Neutron scattering is also an indispensable tool for the study of polymers, biomolecular structures, and structural materials.

The Department of Energy is developing a plan that will be submitted for congressional consideration as part of the upcoming budgets. As this committee continues to make the hard choices that are required by current economic realities, we hope you will consider the importance of the neutron scattering program to this country's scientific well being.

Mr. MYERS. Thank you.

As you well know, it has been a very tight budget over the last several years, and I don't see much improvement this year. I wish we had more, but we will do the best we can with what we have, and thank you for your testimony once again. Good to see you.

The committee will stand in recess for about 10 minutes. And, again, we apologize to those witnesses that are coming on later. If you do have to catch a plane, please work with the staff in the next 10 minutes.

[Recess.]

THURSDAY, FEBRUARY 29, 1996.

RENEWABLE ENERGY PROGRAMS

WITNESS

KIRK BROWN, POLICY DIRECTOR, THE BUSINESS COUNCIL FOR A SUSTAINABLE ENERGY FUTURE

Mr. FRELINGHUYSEN [presiding]. The meeting will come to order again.

Good afternoon.

Mr. Kirk Brown, policy director for the Business Council for a Sustainable Energy Future, good afternoon.

Mr. BROWN. Good afternoon.

Mr. FRELINGHUYSEN. A copy of your entire statement will be included in the record, and if you could give your remarks in 5 minutes, that would be great. Thank you for being with us.

Mr. BROWN. Thank you very much.

Again, my name is Kirk Brown, and I am here on behalf of the members of the Business Council for a Sustainable Energy Future.

The Business Council was formed in 1992. It is comprised of business leaders who share a commitment to pursue a new energy strategy designed to realize our Nation's economic and national security goals through the rapid deployment of efficient, non-, and low-polluting energy technologies.

Business Council members include a diverse range of manufacturers, energy producers, suppliers of energy resources, and energy service companies. Our member companies range in size from Fortune 500 enterprises to small entrepreneurial businesses.

The Business Council recognizes that it is the suppliers and users of energy, not the Federal Government, that ultimately will decide which energy sources will meet our future needs. However, the Federal Government does play an important role in helping the private sector share the risk in investing in clean technologies that, though near economic viability, face obstacles to their widespread market availability.

Today, many efforts using the cost-shared approach advocated during the Bush administration are mid-course in their program cycles. Industry supports the cost-shared approach as the best way for the Federal Government to meet its policy goals while at the same time ensuring Federal renewables research efforts are cost effective.

As Congress seeks new ways to cut the Federal budget, the Business Council strongly encourages Congress to preserve existing multiyear contracts with the renewables industry. The Council also urges Congress to resist the urge to make broad, indiscriminate budget cuts that may cripple cost-effective renewables programs.

Such cuts have the unintended consequence of freezing industry R&D efforts and make the financial community even more reluctant to invest in emerging technologies. Further, such cuts run the risk of ultimately undermining U.S. competitiveness as our technological superiority in renewables is equaled as compared to our trading partners in Europe and Japan.

Today, we can look to striking examples that U.S. renewables are rapidly emerging as competitive options for electric power production. The cost of electricity from wind has fallen from over 30 cents per kilowatt hour in 1980 to 4 to 6 cents per kilowatt hour today. The photovoltaic industry has achieved significant reductions in costs, which, in turn, have spurred healthy increases in sales both domestically and internationally.

The Business Council would like to highlight wind programs such as the Next-Generation Wind Turbine and the Value-Engineered Turbine and solar photovoltaic programs such as PV–Mat, PV:BONUS, and PV–COMPACT that have helped open new vistas of opportunity for manufacturers while achieving important economic and environmental policy objectives. Our written testimony discusses these programs in greater detail.

Finally, the Business Council would like to offer its support of Federal international market development programs for renewables, including the Committee on Renewable Energy, Commerce and Trade, and GT–World.

International markets for renewables are taking off. Last year international demand for wind technologies exceeded $1.5 billion, more than double the prior year. However, competition in developing country markets is intense. U.S. renewables manufacturers compete against foreign manufacturers buoyed by government assistance.

In this regard, it is important to note that, when measured against the relative size of their economies, Japan, Germany, and Sweden are each now making larger R&D investments in renewables than the U.S.

Lastly, I would like to note that the Federal Government's R&D efforts in renewables are being matched by real world, on the ground activities by the U.S. renewables industry to create jobs and open new markets.

A recent demonstration of DOE's success is the announcement by Business Council member Amoco/Enron Solar that it will build a 4-megawatt solar electric generation facility in Hawaii which will use amorphous thin-film modules in the company's new photovoltaic production facility in Virginia.

In fact, in the area of PV production alone, the last 2 years have witnessed 6 companies, including Business Council member United Solar Systems Corporation in addition to Amoco/Enron Solar, announce plans to construct new photovoltaic plants. These activities demonstrate that the Federal Government's risk-sharing efforts do pay off in near-term returns for taxpayers.

In conclusion, the Business Council believes promoting research development and validation of emerging renewable energy technologies will result in the near-term creation of thousands of new jobs, a stronger economy, enhanced export opportunities for our manufacturers, and a cleaner environment.

Cost-shared collaboratives with industry will leverage limited Federal funds in recognition that cooperation with industry is vital for addressing market imperfections impeding the widespread use of renewables. The Business Council strongly supports this approach and urges Congress to continue its support of Federal research development and validation programs for renewables.

Thank you very much for your time.

Mr. FRELINGHUYSEN. Thank you very much for your testimony and for being with us this afternoon.

[The statement of Mr. Brown follows:]

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THE BUSINESS COUNCIL
FOR A
SUSTAINABLE ENERGY FUTURE

PUBLIC WITNESS TESTIMONY:
House Appropriations Committee,
Energy and Water Subcommittee

CONCERNING:
FY 1997 Budget Appropriations for
Renewable Energy Programs
at the Department of Energy

PRESENTED BY:
Kirk Brown

FEBRUARY 29, 1996

THE BUSINESS COUNCIL FOR A SUSTAINABLE ENERGY FUTURE

TESTIMONY:
HOUSE APPROPRIATIONS COMMITTEE,
ENERGY AND WATER SUBCOMMITTEE

CONCERNING:
FY 1997 BUDGET APPROPRIATIONS FOR RENEWABLE ENERGY PROGRAMS

FEBRUARY 29, 1996

INTRODUCTION

The Business Council is pleased to offer testimony to the Energy and Water Subcommittee of the House Appropriations Committee on the proper role for government in promoting energy research and development, as it relates to renewable energy programs at the Department of Energy (DOE).

The Business Council is comprised of business leaders who share a commitment to pursue a new energy strategy designed to realize our nation's economic and national security goals through the rapid deployment of efficient, non- and low-polluting energy technologies. Business Council members include a diverse range of manufacturers, energy producers, suppliers of energy resources, and energy service companies. The diversity of our membership is further reflected in the fact that our member companies range in size from Fortune 500 enterprises to small entrepreneurial businesses. A list of Business Council members is included as Attachment A at the end of this testimony.

FEDERAL PROGRAMS TO PROMOTE RENEWABLE ENERGY RESOURCES

The Business Council recognizes that it is the suppliers and users of energy -- not the federal government -- that ultimately will decide which energy sources will meet our future energy needs. However, the federal government does play an important role in helping the private sector share the risk of investing in deployment of clean technologies that, while at or near economical viability, face financial, informational, or institutional obstacles to their wide market availability.

A quick glance at the demand-side of the energy equation demonstrates the potential market for these technologies. The United States is expected to spend as much as $200 billion on new electric generation capacity in this decade to replace aging power plants and to keep up with rising demand for electricity. US investments pale when compared to those made worldwide. During the 1990s alone, countries throughout the world are expected to spend approximately $1 trillion to improve their energy infrastructure.

Typically, these energy investments could be expected to flow to the least cost option, based on prevailing market conditions. While traditional energy technologies can appear to be lowest cost at first, they may have hidden social and environmental costs -- in the form of pollution, risks to public health, resource depletion, and insecure supply -- that, in the long run, could cause them to cease being the lowest-cost option. Since the future is anything but certain, the federal government has had a long-standing policy of supporting renewable energy research, develop and validation programs in order to make their first costs more attractive in the market.

Today, many efforts using the "cost-shared" approach advocated during the Bush Administration are mid-course in their program cycles. Industry agrees that the cost-shared approach offers the best way for the federal government to meet its policy goals in supporting renewable energy resources while at the same time ensuring that federal renewable energy research efforts are cost-effective. As Congress seeks new ways to further lower those costs, the Business Council strongly encourages Congress to preserve the integrity of existing multi-year contracts with the renewable energy industry. The Council also urges Congress, when making budget cuts, to resist the urge to make broad, indiscriminate cuts that may cripple cost-effective and productive renewable energy programs. Such cuts have the unintended consequence of freezing industry R&D efforts and make the financial community even more reluctant to invest in emerging technologies. Further, such cuts run the risk of ultimately undermining US competitiveness as our technological superiority in renewable technologies is equaled and perhaps surpassed by the aggressive research and deployment programs currently being conducted by our trading partners in Europe and Japan.

Today, we can look to striking examples that the technologies being developed by the US renewable energy industry -- in cooperation with the Federal government -- are rapidly emerging as competitive options for electric power production both in grid and stand-alone applications. For example, in locations with favorable wind regimes, the cost of electricity from wind has fallen from over 30 cents/kWh in 1980 to 4 to 6 cents/kWh today -- making wind competitive with traditional resources. The photovoltaic industry has also achieved significant reductions in costs, which, in turn, have spurred healthy increases in sales both domestically and internationally.

Notwithstanding the significant progress renewable industries have made in reducing costs and increasing technology reliability, barriers still remain that slow their commercialization. DOE is engaged in a number of programs to help eliminate or mitigate the impacts of these barriers. I would like to briefly review a few of these programs that the Business Council believes are particularly effective.

WIND

DOE supports several initiatives designed to improve both technological efficiency and utility acceptance of wind power plants. Programs such as the Next-Generation Wind Turbine and the Value-engineered Turbine are cost-shared efforts in which DOE works closely with the wind industry. These programs have already produced market-ready products.

The Turbine Verification program is jointly funded by DOE and the Electric Power Research Institute (EPRI). The Turbine Verification program helps bridge the gap between turbine development programs and commercial purchases of wind turbines. Ultimately, this effort will help ensure that a mature domestic manufacturing infrastructure for wind turbines takes hold in the US to compete internationally. With very limited funds, DOE and EPRI have leveraged significant private-sector capital to stimulate the commercialization of wind turbines. In 1993, DOE was able to fund two wind projects totaling $22 million with a federal investment of less than $3 million.

Wind programs have been a success story for DOE's overall R&D program. Although wind is making headway in the electric power generation market, present installed wind capacity represents only 0.1 percent of total US generating capacity. Clearly there are opportunities for growth as wind power costs continue to fall.

More and more electric utilities are becoming interested in generating power from large-scale wind power plants. Last year, international demand for wind technologies exceeded $1.5 billion, more than double the prior year. This market is expected to further grow over the next few years.

Maintaining a US presence in this growing industry is a valuable investment of federal resources -- one that will pay off many times in the next several decades.

SOLAR ENERGY

DOE's cost-shared solar energy programs have been highly successful in achieving dramatic reductions in the cost of solar technologies while greatly improving their reliability. A notable recent demonstration of DOE's success is the announcement by Business Council member Amoco/Enron Solar that it will build a 4 megawatt solar electric generation facility in Hawaii which will use amorphous thin-film modules made in the company's new production facility in Virginia.

Faster integration of solar energy systems in both supply- and demand-side applications in our domestic economy -- combined with support for increased exports of US solar technologies to take advantage of emerging multi-billion dollar markets -- will have the parallel benefits of creating thousands of new high-technology manufacturing jobs and improving our environment. Solar technologies available today include photovoltaics (PV), solar water and pool heating, solar process heat, and solar thermal power technologies. The Business Council supports the trend toward market-driven, industry cost-shared programs designed to leverage federal dollars with private-sector participation to enhance private-sector understanding and use of these technologies.

Improving conversion efficiency of solar panels and reducing manufacturing costs will play a key role in sustaining US dominance in the area of PV. The Business Council supports DOE cost-shared initiatives in R&D (thin-films and other advanced materials) and manufacturing (PV-MaT) which address these issues. Equally important is the concept of building integrated PV programs (PV:BONUS) where PV manufacturers, system integrators, and utilities are working together to reduce the cost of PV-generated electricity. Another good model for public-private efforts is the "PV-COMPACT" program, a collaborative effort involving more than 80 electric utilities (representing over half the electricity production in the US) and other interested organizations to garner the economic, commercial and environmental benefits of PV technologies.

PVs and other solar technologies offer the US environmentally benign and cost-effective energy supply options in a variety of market applications. The market viability of these technologies is demonstrated in growing private sector interest in developing new manufacturing facilities related to solar industries. In the area of PV production alone, the last two years have witnessed six US companies -- including Business Council members United Solar Systems Corporation and Amoco/Enron Solar -- announce plans to construct new photovoltaic plants. This activity is a unique example of DOE funding encouraging significant private-sector investment that creates new jobs. The Business Council strongly urges Congress to continue its support of public/private partnerships that help ensure that US companies can compete effectively in rapidly emerging world renewable energy markets.

INTERNATIONAL ACTIVITIES

Finally, the Business Council would like to offer its support of federal programs designed to help open important international markets for renewable technologies, including DOE programs such as the Committee on Renewable Energy, Commerce and Trade (CORECT) and GT-World.

The developing world -- Eastern and Central Europe, the former Soviet Union, Asia, Africa, and Latin America -- presents tremendous opportunities for the deployment of renewable energy technologies. Renewables offer great flexibility to developing countries looking for economically viable, reliable, and clean energy supply options that can be used to serve growing metropolitan areas and remote rural regions where power is otherwise unavailable. Renewables can also help support the development of commercial activities such as agriculture and telecommunications through remote power source applications. Competition in rapidly growing developing country markets is intense; US renewables manufacturers face the dual obstacles of competition from conventional energy sources and foreign renewables manufacturers buoyed by government assistance.

In this regard, it is important to note that major US competitors are now making aggressive moves into the renewables market. When measured against the relative size of their economies, Japan, Germany, and Sweden are each now making larger government R&D investments in renewables that the US. In fact, the US taxpayer spends a lower portion of its R&D budget on energy than any other taxpayer in an industrialized, market-based economy.

US government assistance in identifying market opportunities, providing education and training for energy decision-makers in the developing world, and supporting demonstrations of renewable technologies in overseas applications promises to help ensure that US renewables manufacturers will be successful in capturing market-share throughout the expanding global market for clean energy technologies and services.

CONCLUSION

Promoting research, development and validation of emerging renewable energy technologies will result in the near-term creation of thousands of new jobs, a stronger economy, enhanced export opportunities for domestic manufacturers, and a cleaner environment. DOE's budget request continues federal emphasis on developing low- and non-polluting energy technologies and services as a means of achieving these goals. It utilizes cost-shared collaboratives with industry to leverage limited federal funds in recognition that cooperation with industry is vital for addressing market imperfections impeding the widespread use of renewables. The Business Council strongly supports this approach, and urges Congress to continue its support of federal research, development and validation programs for renewable energy technologies.

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Attachment A

The Business Council for a Sustainable Energy Future Members

American Flywheel Systems
American Gas Association
American Standard
American Wind Energy Association
Bergey Windpower
Brooklyn Union
Columbia Gas System
Electric Vehicle Industry Association
Energy Conversion Devices, Inc.
Engelhard Corporation
Enron Corp.
GHK Company
Honeywell Inc.
ICC Technologies
International Fuel Cells
Julander Energy Corporation
KENETECH Corporation
Maytag Corporation
New York Power Authority
North American Insulation Manufacturers Association
Peak Power Corporation
Polyisocyanurate Insulation Manufacturers Assocation
Proven Alternatives, Inc.
R. Lynette & Associates, Inc.
SYCOM Enterprises
Sacramento Municipal Utility District
Solar Energy Industries Association
Southern California Edison Company
Southern California Gas Company
Union Pacific Resources
United Solar Systems Corporation
U.S. Export Council for Renewable Energy
Zond Systems Inc.

THURSDAY, FEBRUARY 29, 1996.

INTERNATIONAL THERMONUCLEAR EXPERIMENTAL REACTOR (ITER)

WITNESS

DAVID OVERSKCI, SENIOR VICE PRESIDENT, SCIENCE APPLICATIONS INTERNATIONAL CORPORATIONS

Mr. MYERS. Dr. David Overskci, Senior Vice President, Science Applications International Corporation. We will be pleased as usual to enter your prepared statement for the record, and you may proceed for your 5 minutes.

Mr. OVERSKCI. I thank you.

It is with both pleasure and sadness I am here today. A pleasure to talk in support of a program that I have had some association with for a number of years; sadness because of the fact that this committee, in particular the Chairman, has been very visionary and long-standing in support of these activities, and it is sad he is going to be leaving this august body. So with that, I give you some recognition, and the committee, of course, for the support that they have given.

Mr. MYERS. Thank you.

Mr. OVERSKCI. In particular today I want to talk about three or two major programs that are funded out of your committee. One is the ITER program and the other is the National Ignition Facility. I am here today at the personal request of our CEO, the Chairman and the Founder of our company, which is Dr. Bob Eister, and it is an employee-owned company which is dedicated to the development and the application of technologies and science to the country's needs.

Let me get to the first item, which is ITER. ITER is a program that was initiated in 1985 by President Reagan. Its purpose was to combine the world's best technology and science programs in the area of fusion together to culminate in a device called the international thermonuclear experimental reactor to demonstrate the scientific and technological feasibility of fusion.

This program was proposed in 1985, it was initiated in 1987, and we are now in the midst of a second phase called the engineering and design activity. I am somewhat saddened to find out that the Department of Energy, as the budget is squeezed, the Department of Energy is continuing to reduce its commitment to this ITER program. And it is very disappointing in the context that there is an enormous amount of leverage that is realized by this country in continuing to participate in the ITER program. Every dollar we invest generates a matching dollar—I can't say it is 4 to 1 because of the situation in the Soviet Union, or former Soviet Union, but nonetheless the multiplier is clearly above 3 to 1.

It is extremely important to me and the people of my background that are very dedicated to the purpose of fusion as a new energy source to carry on with this commitment, and I would encourage the Congress to make sure that the Department of Energy not draw back from the commitment from a program that they initiated.

They have this year reduced their funding for this program by about $35 million, and we understand they are considering possible further reductions in the future and this is technically not realistic since ITER embodies everything that is necessary for this program to ever achieve its end objective.

And programmatically it does not make sense either because we have made tremendous progress, scientific and otherwise, in this country in this field, and the enormous results that have finally been completed at Princeton verify and confirm this is the right thing to do and the country would be well served now by taking the tremendous science and technical skills at that facility and redirecting them and deploying them in programs at JET in Europe, JT 60–U in Japan, and the DIII–D device, which is another flexible next-generation machine in San Diego, California. So I would encourage you to give continued support for this program.

The other program I wanted to discuss is the National Ignition Facility. This is a program under defense programs in the Department of Energy and it would be a major facility located at Lawrence Livermore to do confirmation and validation of codes and theories that are necessary to both design nuclear weapons and confirm safety and reliability of nuclear weapons.

This is important both for maintaining our science-based stockpile stewardship, which is a fundamental element of our safe and secure defense in the future; and it will also be important because this facility will allow the generation of never before achieved conditions here on earth that would be, and I put in quotes, "stellar-like." This means that astrophysicists and scientists will be able to in a laboratory environment investigate high pressure, high density, high temperature conditions similar to those in stars. We will have a combination through this facility of science and national security.

With that, I want to conclude. Oh, let me point out it is $191 million, and I encourage you to vote for the whole thing. So with that, I request that the committee continue their support for these sorts of programs, and I thank you for your time.

Mr. MYERS. Saved the best for last, didn't you?

Mr. OVERSKCI. Yes.

Mr. MYERS. Thank you very much, David.

[The statement of Mr. Overskci follows:]

Energy and Water Development Subcommittee
House Appropriations Committee

Testimony
on the FY'97 Energy & Water Appropriations Bill
February 29, 1996

David O. Overskei
Senior Vice President
Science Applications International Corporation
San Diego, California

Mr. Chairman and members of the subcommittee, thank you for the opportunity to appear before you today. I represent Science Applications International Corporation (SAIC), one of the largest employee owned companies in the United States. SAIC began in 1969 with 6 people and has grown to over 21,000 employees today. This has been achieved through a deep corporate commitment to providing our customers with advanced technology and science solutions to their problems, thus contributing to a better tomorrow for the U.S. I am here today to ask for your continued support for two major science/technology programs, the International Thermonuclear Experimental Reactor (ITER) and the National Ignition Facility (NIF). We are proud to be participants in these efforts, and believe that they represent the type of federally funded research programs that are necessary to keep the US secure in the future.

As you know, ITER was born of President Reagan's vision of getting the technologically advanced countries of the world to cooperatively apply their best science and technology to the development of a new, limitless energy source for the world...fusion energy. His proposal to jointly design an experimental fusion device, that would for the first time ever, demonstrate the scientific and technological feasibility of fusion power, was accepted by the European Community, Japan, and the then Soviet Union. This program, which is the largest international collaboration in science, has now become the premier example of how to conduct international science collaborations in the future. The Conceptual Design Activity was successfully finished in 1991, and the four Parties are now in the middle of the Engineering Design Activity (EDA), which is to be completed in 1998. Of great concern to our company, to other U.S. industrial participants in the ITER program, and to the international partners in ITER, is the Department of Energy's consideration of strongly reducing its commitment to the ITER EDA, if not withdrawing completely. I believe such an action would be totally contrary to developing fusion energy, and would have disasterous implications for future international collaborations that would involve and benefit the U.S. My reasons are as follows:

1. **Technical**: Since 1984, numerous reviews conducted by the DoE and external review committees such as the National Academy of Science, have identified a device that would demonstrate a sustained fusion reaction as the logical and necessary next step for the U.S. fusion energy research program. With the significant experiments already completed at the TFTR device at the Princeton Plasma Physics Laboratory, the DIII-D at General Atomics, the JET in Europe, and the JT 60U in Japan, the scientific data in hand confirms that the ITER device can be built and will achieve a self-sustained fusion burn. Through ITER, we can realize the feasibility of fusion power, our quest for all these years. ITER IS THE CORRECT NEXT STEP!

2. **Financial**: For years in the US the issue has been money. Would the DoE reinvest dollars from currently operating programs to proceed to the next step, or request additional funds from the Congress? With the advent of ITER, significant financial and technical leverage has been achieved which has allowed continued research toward the fusion objective without increased budgets. Each dollar that the US contribues to the ITER effort has been successfully multiplied through the contributions of the international partners. However, because of last years significant downsizing of the magnetic fusion program, DoE has chosen to fund ITER at $55M rather than the agreed upon $82M. The credibility of the U.S. will be severly damaged if this trend is allowed to continue.

3. **Programmatic**: With the TFTR device having successfully completed its mission, the TFTR facility can now be shut down, allowing the transfer of superb

diagnostic systems and scientific personnel to the facilities that explore more current concepts at JET in Europe, JT 60-U in Japan, and the DIII-D device at General Atomics, which is already a significant international scientific collaboration. This would allow a very productive, but focussed US fusion research effort to be conducted at the current budget levels, while maintaining the progress on ITER and the option for the U.S. to participate in a future ITER construction.

True to President Reagan's vision in 1985, ITER was then and is still now the best path to realize the promise of fusion energy.

Of even greater importance to the Nation's future security and defense preparedness is the National Ignition Facility, which is the cornerstone of the DoE's Science Based Stockpile Stewardship Program. SAIC is proud to be one of 18 high technology industries contributing to the design and engineering of the National Ignition Facility, which will be located at the Lawrence Livermore National Laboratory.

This facility, when operational, will generate miniature stars in controlled laboratory conditions. Using the data from these controlled fusion experiments, scientists from the weapons laboratories will be able to validate and improve their weapons codes. This validation will potentially lead to a better understanding of the aging process associated with existing nuclear weapons, and could result in improvements in weapon safety systems. Both aspects are important for the future security and reliability of our nuclear weapons stockpile. Moreover, in the absence of underground testing, keeping the weapons scientists and engineers active in NIF experiments maintains the technical and intellectual skills that would be necessary to design new weapons, should such a need arise in the future.

In addition, this facility will be made available to researchers and faculty from numerous academic institutions. Through the NIF experiments, researchers will be able to investigate stellar dynamics, the physics of super dense and high pressure plasmas, and will continue to make advances in the science of complex fluid hydrodynamics. SAIC requests that you fully support the Department of Energy's request of $191 M for NIF funding in FY 1997, with a Title II construction authority and a commitment to continue the full appropriations of funds for this important defense program activity.

Lastly, we note that much of the technology developed by the DoE laboratories and the industrial support contractors could, with modification and some future development, be applied to medical diagnostic and treatment applications. We encourage the Committee to provide a modest amount of funds to develop such technologies. Such a modest program could lead to significant future medical care cost reductions, while improving the lives of all Americans.

Mr. Chairman and subcommittee members, I thank you for this opportunity to testify before you today, and we look forward to your continued support of the above programs.

THURSDAY, FEBRUARY 29, 1996.

BIOMASS PROGRAM

WITNESS

B. REID DETCHON, EXECUTIVE DIRECTOR, BIOMASS ENERGY ALLIANCE

Mr. MYERS. Reid Detchon, who is Executive Director of the Biomass Energy Alliance. Your prepared statement will be in the record, and you may proceed for 5 minutes as you like.

Mr. DETCHON. Thank you for the opportunity to be here today. I will join, I am sure almost everybody else, in noting this is sort of a farewell tour for Mr. Bevill and yourself. It is a particularly sad moment to see you depart, and I certainly wish you well in your future endeavors.

Mr. MYERS. Thank you.

Mr. BEVILL. Thank you.

Mr. DETCHON. I am here on behalf of the Biomass Energy Alliance, which is a broad based coalition of industry, utilities, agriculture, and environmental groups, and more specifically my testimony today is supported by a wide range of 13 groups who are listed in my prepared remarks. But I would say that this unusual diversity is itself testimony to the very benefits of biomass energy.

Why is it important to invest in biomass energy R&D? As you evaluate your priorities, why should biomass stake a claim? The answer, quite simply, is the size and scope of the potential benefits. And I will break those down into five categories.

Why biomass? First, because of its abundance. If the market is there, biomass could sustainably produce as much as 20 percent of America's energy needs early in the next century by taking advantage of the tremendous productivity of our farmers and foresters and our land. First from waste products like rice straw and corn fiber, sawdust and pulp and paper sludge, even yard trimmings from residential trash and later from low-cost energy crops such as switchgrass.

Why biomass? Second, because of its ability to reduce oil imports. We need alternative fuels desperately before we shed American blood once again to protect our access to oil. The Department of Energy was created 20 years ago in response to this problem but its impact to date has been slight. Very, very little of the Department's budget addresses our dependence on oil and yet the Secretary of Energy declares that another oil crisis is, quote, "imminent."

Our dependence on OPEC is once again on the rise and will reach 50 percent in the year 2000. The biofuels program, together with improvements in energy efficiency, offers the most promising near-term solution at a relatively minuscule cost.

Mr. Chairman, picture a giant oil tanker returning to the Persian Gulf filled with money instead of oil. Now picture a little dinghy attached to that big oil tanker pulling the other way. That will give you a sense of the scale of our oil imports compared to what we invest in alternatives. We ship upwards of $50 billion overseas every year to pay for oil. We spend just one-twentieth of 1 percent of that amount on R&D to replace it.

Why biomass? Third, because of its economic impact. That $50 billion in oil imports has real economic consequences to the Nation. It contributes to inflation. It depletes our domestic investment capital, it devalues our currency, and reduces our standard of living.

What if we spent those billions of dollars every year in the Middle West, Mr. Chairman, instead of the Middle East? Biomass power plants and biofuels facilities typically will rely on feedstocks produced within a 50-mile radius. That means investment, construction, new jobs and economic growth throughout rural America.

Why biomass? Fourth, because of its importance to the environment. If the Nation is going to honor its commitment to reduce its greenhouse gas emissions to forestall the danger of global climate change, biomass is one of our most important options. Because plants need carbon dioxide to grow, the production of biomass for energy absorbs the very greenhouse gases that are given off when it is used. In other words, its contribution to global warming is zero.

Why biomass? Fifth, and last, because it is ready now to become a major contributor to our Nation's energy supply. I can report that in every section of the country interest in biomass is growing and its commercial potential is enormous. The results from the ethanol pilot plant you made possible at NREL are just now coming in and they are supporting all of our homes and expectations for this technology.

The critical need today is for demonstration of this technology. Small Federal investments can reduce the risk to the private sector and make big projects happen. Because biomass conversion technology can take waste disposal problems and turn a negative into a positive, the first success will stimulate an explosion of private investment.

We don't yet have the President's budget request, but I expect it will call for an increase above the level appropriated last year. I respectfully urge your support for that amount. I do so because as you evaluate your priorities for investment, we must compare the likely payoffs, the potential benefits to the Nation.

Mr. Chairman, the payoff from biomass energy development will be so large that your current investment will seem a bargain. It will seem minuscule compared to the benefits that will be gained. We have an enormous untapped domestic renewable energy resource in biomass, and the manpower in the great American agricultural regions to produce it. Once again, I urge your support.

Mr. MYERS. Well, thank you very much for your testimony.

[The statement of Mr. Detchon follows:]

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Statement of B. Reid Detchon
Executive Director, Biomass Energy Alliance

Subcommittee on Energy and Water Development
Committee on Appropriations
U.S. House of Representatives
February 29, 1996

SUMMARY: Biomass energy development offers enormous potential benefits for the Nation -- abundant renewable energy produced in America; reduced dependence on imported oil; a smaller trade deficit; more jobs in rural America; more income for farmers; improved soil and water quality; and reduced greenhouse gas emissions. A relatively small increase in federal funding will have a big payoff in spurring rapid development of the industry

Mr Chairman and members of the Subcommittee, thank you for the opportunity to testify today I am particularly sorry, Mr Chairman, that today will be my last opportunity to appear with you presiding I believe you have represented the best interests of the American people and our rural heartland in particular, and I wish you well in your next endeavors

I am here on behalf of the Biomass Energy Alliance, a broadbased coalition of industry, utilities, agriculture, and environmental groups. More specifically, my testimony today is supported by:

- The Clean Fuels Development Coalition, the Ethanol Alliance, and the American Biofuels Association, from the fuels industry;
- The United BioEnergy Commercialization Association, representing utilities;
- The National Association of Conservation Districts, the Soil and Water Conservation Society, the New Uses Council, the Consortium for Plant Biotechnology Research, and the American Energy Crop Association, among agricultural groups; and
- The Natural Resources Defense Council, the Union of Concerned Scientists, Citizen Action, and the Environmental and Energy Study Institute, among environmental groups

This unusual diversity is itself testimony to the varied benefits of biomass energy.

Why is it important to invest in biomass energy R&D? As you evaluate your priorities, why should biomass stake a claim? The answer, quite simply, is the size and scope of the potential benefits -- and I will break those down into five categories.

Why biomass? First, because of its abundance. If the market is there, biomass could sustainably produce as much as 20 percent of America's energy needs early in the next century by taking advantage of the tremendous productivity of our farmers and foresters and our land The sources of this biomass range from waste products -- like rice straw and corn fiber, sawdust and pulp and paper sludge, even yard trimmings from residential trash -- to low-cost energy crops grown especially for this purpose, such as switchgrass and other native American prairie grasses grown on farmland that the U S. Department of Agriculture projects will become available over the next 30 years.

Why biomass? Second, because of its ability to reduce oil imports The world's economic security now rests on the stability of the House of Fahd -- a feudal monarchy in a desert kingdom in one of the most volatile regions of the world We need alternative fuels -- desperately -- before we shed American blood once again to protect our access to oil

The Department of Energy was created 20 years ago in response to this problem, but its impact has been slight. Very, very little of the Department's budget addresses our dependence on oil, and yet the Secretary of Energy declares that another oil crisis is "imminent." Our dependence on OPEC is once again on the rise and will reach 50 percent in the year 2000 The biofuels program, together with improvements in energy efficiency, offers the most promising near-term answer at a relatively minuscule cost

Mr. Chairman, picture a giant oil tanker returning to the Persian Gulf, filled with money instead of oil Now picture a little dinghy attached to that big oil tanker, pulling the other way That will give you the scale of our oil imports compared to what we invest in alternatives We ship upwards of $50 billion overseas every year to pay for oil. We spend just 1/20th of 1 percent of that amount on the R&D we need to replace it.

Why biomass? Third, because of its economic impact That $50 billion in oil imports has real economic consequences for the Nation: It contributes to inflation It depletes our domestic investment capital. It devalues our currency and reduces our standard of living

What if we spent those billions of dollars every year in the Middle West, Mr. Chairman, instead of the Middle East? Because biomass is bulky, it doesn't pay to ship it very far Biomass power plants and biofuels facilities typically will rely on feedstocks produced within a 50-mile radius That means investment, construction, new jobs, and economic growth throughout rural America.

Why biomass? Fourth, because of its importance to the environment. If the Nation is going to honor its commitment to reduce its greenhouse gas emissions to forestall the danger of global climate change, biomass energy is one of our most important options Because plants need carbon dioxide to grow, the production of biomass for energy absorbs the very greenhouse gases that are given off when it is used In other words, its contribution to global warming is zero This is called a closed carbon cycle

The so-called "Car Talk" committee, formally known as the Policy Dialogue Advisory Committee to Develop Options for Reducing Greenhouse Gas Emissions from Personal Motor Vehicles, was unable to come together around a unified strategy to recommend to the President because of disagreements over the appropriate role of fuel economy standards. But on one point the committee did agree -- the importance of liquid biofuels.

The Majority Report of the Car Talk committee found "a substantial consensus within the technical community regarding the strong potential of cellulosic biomass-based fuel options for greenhouse gas mitigation" and recommended a $100 million annual R&D budget for this topic alone. The dissenting report of the auto industry members **similarly concluded** that with "significant support for research," cellulosic biomass fuels could produce a "technological home run" on greenhouse gas reductions.

These greenhouse gas benefits derive equally well from electricity produced from biomass instead of fossil fuels, and the opportunities for power production are as significant as those for transportation. The amount of power produced in the U.S. from biomass, chiefly at pulp and paper plants for their own consumption, rivals the energy contribution of hydroelectric power. These applications can be replicated worldwide and could be particularly important in developing countries that otherwise are expected to have very sharp increases in greenhouse gas emissions.

In addition, perennial energy crops like switchgrass stabilize the soil and reduce the runoff of pesticides and other chemicals into our waterways. For this reason, they could be grown and harvested on fragile and erodible land, producing income to the farmer while storing carbon and protecting the soil. They also provide good wildlife habitat.

Why biomass? Fifth and last, because it is ready now to become a major contributor to the Nation's energy supply. Ground is being broken this year on a new gasifier in Vermont that will produce power cleanly and efficiently from abundant wood waste. In California, a partnership has been formed to produce ethanol from rice straw -- turning a waste disposal problem into a transportation answer, thanks to the support of this Committee.

Believe me, no one is more impatient than I to see the fruits of your investment in this technology, but I can report that in every section of the country, interest in biomass is growing, and its commercial potential is enormous. The results from the ethanol pilot plant you made possible at NREL, the National Renewable Energy Laboratory, are beginning to come in, and they are supporting all of our hopes and expectations for this technology.

The critical need today is for demonstrations of the technology that has been developed with your support through the Department of Energy over the last 20 years. Small federal investments can reduce the risk to the private sector and make big projects happen. Because biomass conversion technology can take waste disposal problems and turn a negative into a positive, the first success will stimulate an explosion of private investment.

We do not have before us today the President's budget request for FY 1997, but I expect that it will call for an increase above the level appropriated last year. I respectfully urge your full support for the full amount. I do not do so lightly, in view of the enormous pressures and competing demands you face at a time when you are trying to restrain the federal budget. I do so because, as you evaluate your priorities for investment, you must compare the likely payoffs -- the potential benefits to the Nation.

Last year's appropriation of $55.3 million represented a reduction in funding of 11 percent from the $62.1 million provided in FY 1995 -- a relatively modest cut compared to some others, but nonetheless one that caused significant damage to the program at NREL. Last year's request of $80 million was fully justified, and in fact we recommended an increase of $5-10 million. While we do not expect that large a request from the Administration this year, we believe it would be money well spent.

Mr. Chairman, the payoff from biomass energy development will be so large that your current investment will seem a bargain. It will seem minuscule compared to the benefits that will be gained. We have an enormous untapped domestic renewable energy resource in biomass and the manpower in the great agricultural regions of this country to produce it. Once again, I urge your support.

THURSDAY, FEBRUARY 29, 1996.

NUCLEAR WASTE ISSUES

WITNESS

HON. RICHARD H. BRYAN, A U.S. SENATOR FROM THE STATE OF NEVADA

Mr. MYERS. Senator Bryan, our colleague from Nevada, if you would like to come forward. We are pleased to have you before the committee. Your prepared statement will be placed in the record and you may proceed as you like.

Senator BRYAN. Mr. Chairman, I appreciate that. My remarks will be abbreviated from that prepared statement. Let me preface my comments by thanking you for providing me with the opportunity to testify here today. My colleague, Senator Reid, and I may well be unique witnesses in the series of hearings you have scheduled this afternoon. We are not asking for any money.

Mr. MYERS. Talk as long as you like.

Mr. BEVILL. We will take that matter up now.

Senator BRYAN. Indeed, I think we could stipulate to ending a program that could save considerable money, and we would be delighted to join in that.

Mr. Chairman and members of this subcommittee, as you know, the fiscal year 1997 energy and water appropriations bill provides funding for a Federal program that is of great interest to us in Nevada and I make reference to the commercial nuclear waste program.

Let me be candid, if I may. Nevada did not create the civilian nuclear waste problem and, frankly, we don't want any part in solving it. After spending nearly $5 billion, the Yucca Mountain program is, and I must say I think on this subject there is an emerging consensus, if not unanimity, it is a failure. It is time to cut our losses and zero out the funding for this program.

Failing in its attempt to target Nevada for a permanent dump, the nuclear power industry has devoted its attention to trying to force Nevada to host an interim facility. If one can call a facility with the license for a life-span of 100 years, subject to renewal, an interim facility.

Efforts to accommodate the nuclear power industry's new demands for an interim storage facility through the normal authorizing process, as each of you know, has proved unsuccessful, to date. Last year, however, an effort was launched to do an end run around the authorizing process and insert language in the fiscal year 1996 energy and water appropriations bill that would have targeted Nevada for interim storage. Neither the Senate- nor the House-passed bill would have allowed interim storage in Nevada.

The language requiring interim storage in Nevada was introduced in the conference. Fortunately for Nevadans, vigorous opposition by our delegation, a veto threat by the administration, and support from our position by House Speaker Gingrich headed off the threat of interim storage in last year's legislative process.

My concern, of course, is this is a new year, and once again we may be targeted through the appropriation process. As each of you know, one of the very few minimal protections provided Nevada in the 1982 act and again in the 1987 provision was the assurance that Nevada, as the site chosen for characterization for a permanent repository, would not be considered for a temporary facility. Unfortunately, now that this prohibition has become inconvenient for the nuclear industry, many in Congress are jumping to eliminate this even modest semblance of fairness.

Passing legislation to accommodate the nuclear power industry's demands for interim storage is, I respectfully submit, bad public policy. There simply is not pressing need for such a facility. The Nuclear Waste Technical Review Board, in a recent letter to both Congress and the Secretary of Energy, makes that point very clear when it says, and I quote, there is no compelling technical or safety reason to move spent fuel to a centralized storage facility in the next few years.

Mr. Chairman and members of this subcommittee, an interim storage facility in Nevada will place the health and safety and, indeed, the economic well-being, of the great majority of Nevadans who live in the metropolitan Las Vegas area at risk. But the effects of a centralized interim storage proposal in Nevada is not limited to Nevada. If I make no other point today, may I respectfully suggest that you have a personal and vested interest in terms of your own constituency responsibilities.

Creating an interim storage in Nevada would result in an unprecedented volume of shipments of large levels of nuclear waste through major population centers across the Nation. Six of the nine members of this subcommittee, including its distinguished Chairman and the Ranking Member, have districts that include major shipping routes should nuclear waste storage at the interim site ever become a reality in Nevada. I hope the subcommittee does not underestimate the risk involved in such a massive shipment.

The nuclear power industry's proposed shipment of at least 86,000 metric tons of waste, 16,000 shipments through 43 States, will create unprecedented threats to the health and safety of communities across the Nation.

Parenthetically, let me just say that yesterday, as a member of the Commerce Committee in the other body, I had occasion to participate in rail safety hearings. Every one of you is mindful of what occurred just a few miles outside of the Nation's capital. In a series of literally 26 days we had an accident, a serious rail accident every 4 days. That is part of the risk that adheres in this massive shipment from rail transport alone.

Instead of minimizing the risk by choosing a regional approach for siting a facility, the nuclear power industry has targeted Nevada. In a quick look at a map identifying the location of nuclear reactors across the Nation, it indicates that Nevada is about as far as you can get from being centrally located. In addition, mandating interim storage in Nevada is fiscally irresponsible. With prospects for a permanent facility dimming, there simply is no justification for the huge infrastructure costs associated with building interim storage in Nevada compared to other possible locations.

For example, the construction of a rail spur to the Nevada Test Site, the area proposed for the interim storage facility, would cost at least $1 billion. Hardly fiscally responsible when one considers there are other sites across the country which have an infrastructure already in place.

No one argues today, Mr. Chairman and members of this subcommittee, that Yucca Mountain was chosen as the site for characterization for a permanent repository because it was found by scientists to be the best potential site. In point of fact, as we all know, Nevada was chosen because of a political decision. Nevada has a small representation in the Congress. It was my sense of indignation and outrage in 1987 when Nevada was selected as the sole site to be characterized for the permanent repository, a process that once again occurred in the conference process, that drove me to leave the Governor's office in mid term to seek the office which I currently hold.

Mr. Chairman, I would urge this subcommittee not to play a part in a repeat of this mistreatment that occurred in 1987 and reject any attempt to include in any appropriation bill language to designate Nevada as an interim storage site, and I thank you, Mr. Chairman and members of the subcommittee.

Mr. MYERS. Well, thank you. Since you made the statement for Senator Reid, then I guess you can just say amen.

Senator REID. Amen.

[The statement of Senator Bryan follows:]

NEWS BULLETIN
RICHARD BRYAN
UNITED STATES SENATOR
STATE OF NEVADA
104TH CONGRESS

FOR IMMEDIATE RELEASE
DATE: February 29, 1996

CONTACT: Karen Kirchgasser
202/224-6244

STATEMENT OF SENATOR RICHARD BRYAN BEFORE THE ENERGY AND WATER SUBCOMMITTEE HOUSE APPROPRIATIONS COMMITTEE

February 29, 1996

Mr. Chairman and Members of the Subcommittee, thank you for providing me the opportunity to testify here today. Senator Reid and I may well be unique witnesses in this series of hearings --- we may be the only witnesses not asking the Subcommittee for money, and in fact are asking you to eliminate funding for a program in your jurisdiction.

As you know, the legislation you are considering today, the FY 1997 Energy and Water Appropriations bill, provides funding for a federal program of great interest to the State of Nevada — the commercial nuclear waste program.

Mr. Chairman, I think my views, which are strongly shared by the great majority of Nevadans, are well known. I strongly oppose using Nevada as the dumping place for the nuclear waste industry's toxic waste. To be blunt, Nevadans did not create the civilian nuclear waste problem, and we want no part in solving it. We have no nuclear power in Nevada, and we simply do not want to play host to nuclear waste.

For 14 years, I have fought the permanent repository program at Yucca Mountain. After spending nearly $5 billion, the Yucca Mountain program is, by nearly unanimous agreement, a failure. Despite the vigorous efforts of the nuclear power industry, the Department of Energy and their friends in Congress it is becoming increasingly clear that a permanent repository will likely never be built at Yucca Mountain.

It is time to cut our losses, zero out funding for the Yucca Mountain program, and find a way to return any remaining Nuclear Waste Fund revenues to the utilities for use in managing their own waste.

Unfortunately, the failure of the Yucca Mountain program, as welcome as it is in Nevada, has led to a new threat to our health and safety. Faced with the failure of its effort to target Nevada for a permanent dump, the nuclear power industry has devoted its attention and influence to trying to force Nevada to host an "interim" facility --- if you can call a facility with a licensed life of 100 years, subject to renewal "interim."

As members of the Subcommittee are undoubtedly aware, efforts to accommodate the nuclear power industry's new demands for an interim storage facility through the normal authorization process have so far not been successful. The nuclear power industry's authorization legislation is stalled in the House for a variety of reasons. The legislation faces an even greater challenge in passing the Senate, where Senator Reid and I are committed to blocking its passage by any means necessary. Finally, the legislation faces the likelihood of a Presidential veto should it pass in a form that targets Nevada for interim storage.

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Last year, with the cooperation of numerous Members of both the House and Senate Appropriations Committees, an effort was launched to do an end run around the authorization process, and insert language into the FY 1996 Energy and Water Appropriations bill to target Nevada for interim storage. Once again, in a pattern now familiar to Nevadans, neither the Senate nor the House passed bill would have allowed interim storage in Nevada, but language was introduced in the conference to require interim storage in Nevada.

Fortunately for Nevadans, vigorous opposition by the Nevada Congressional delegation, a veto threat by the Administration and support for our position by House Speaker Gingrich headed off the threat of interim storage legislation last year. My concern this year, of course, is that Nevada will once again be targeted through the Appropriations process.

Targeting Nevada through the normal authorization process is a threat to the health and safety of every Nevadan, and is fiscally, environmentally, and scientifically irresponsible. Doing it through the Appropriations process adds an element of unfairness and inequity reminiscent of the back room deals in 1987 that led to Nevada being singled out for the permanent repository.

One of the few protections provided Nevada in 1982, and again in 1987, was the assurance that Nevada, as the site chosen for characterization for a permanent repository, would not be considered for a temporary facility. Unfortunately, now that this prohibition has become inconvenient for the nuclear power industry, many in Congress are jumping to eliminate even this modest resemblance to equity.

Passing legislation to accommodate the nuclear power industry's demands for interim storage is bad public policy; there simply is no pressing need for such a facility. Unpleasant as it may be to the nuclear power industry executives charged with notifying their neighboring communities of the need to construct additional storage, there is simply no technical reason the utilities cannot manage their own waste.

Experts across the board agree that there is no pressing need for interim storage. The Nuclear Waste Technical Review Board, in a recent letter to both Congress and the Secretary of Energy, makes this point very clear when it says "there is no compelling technical or safety reason ... to move spent fuel to a centralized storage facility in the next few years."

While the need for a centralized interim storage facility is questionable, at best, the consequences of rushing to build such a facility, particularly in Nevada, are significant. An interim storage facility in Nevada will place the health and safety of a community of one million, in Las Vegas, at great risk. Interim storage in Nevada will create the potential for great economic damage for a city that depends to a large extent on its status as a premier international tourist destination.

The effects of centralized interim storage in Nevada are by no means limited to Nevada. Most significantly, creating an interim storage program in Nevada would result in unprecedented shipments of large volumes of high level nuclear waste through major population centers across the nation.

In fact, on the subject of transportation of the waste, members of this Subcommittee have a lot in common with Nevada. Six of nine members of the Subcommittee, including both the Chairman and Ranking Member, have districts that include major shipping routes should interim storage ever become a reality in Nevada. With the exception of the now shutdown Humbolt Bay plant in Mr. Riggs district, none of the Congressional Districts represented on this panel host a nuclear power plant.

I hope the Subcommittee does not underestimate the risks involved with the transportation of high level waste to Nevada. The nuclear power industry's proposed shipment of at least 86,000 metric tons of waste --- 16,000 shipments through 43 states --- will create unprecedented threats to the health and safety of communities across the nation.

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Instead of minimizing the risk by choosing a regional approach to siting a facility, the nuclear power industry has irrationally and irresponsibly chosen Nevada. A quick look at a map identifying the location of nuclear reactors in the United States shows that Nevada is about as far as you can get from being centrally located.

In addition, mandating interim storage in Nevada is fiscally irresponsible. Even our most visible adversary over the past 14 years, Senator Bennett Johnston, concedes that the only reason to consider Nevada for interim storage is the possible presence of the permanent facility. With prospects for a permanent facility dimming, there is simply no justification for the huge infrastructure costs associated with building interim storage in Nevada compared to other possible locations. The construction of a rail spur to the Nevada Test Site, necessary for an interim storage facility, would cost at least $1 billion --- hardly fiscal responsibility when numerous sites exist across the nation that already have the infrastructure needed to accommodate a storage facility.

No-one can argue that Yucca Mountain was chosen as the site for characterization for a permanent repository because it was found by scientists to be the best potential site. As we all know, it was a purely political decision, taking advantage of Nevada's small representation in Congress. It was my outrage at the treatment of Nevada by Congress in 1987 that prompted me to leave the governorship of Nevada in mid-term, and run for the Senate.

I urge this Subcommittee not to play a part in a repeat of the mistreatment of Nevada in 1987 by considering language in an Appropriations bill which targets Nevada for interim storage.

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THURSDAY, FEBRUARY 29, 1996.

NUCLEAR WASTE ISSUES

WITNESS

HON. HARRY REID, A U.S. SENATOR FROM THE STATE OF NEVADA

Mr. MYERS. The committee will be pleased to hear from our colleague and fellow appropriator from Nevada.

Senator REID. Thank you very much, Mr. Chairman.

As my colleague indicated, I do appreciate the opportunity to appear here today. I am here to oppose funding for interim storage at Yucca Mountain or anyplace else in Nevada.

What we are doing here is, in my opinion, if this is attempted, is racing to fix a nonexistent problem. Why are we being pressed to go full throttle with interim storage for nuclear waste? Because the nuclear industry and their handlers in the Congress are creating an imaginary crisis in an attempt to solve their commercial problem. This is another attempt by a specific industry to get the Federal Government to provide a solution to a political dilemma. The imaginary crisis is the storage of spent reactor fuel at operating reactors. Because, Mr. Chairman, there really is no crisis.

This is not a problem that requires a 1998 decision. Essentially, we have been asked to throw out well-established protections for 250 million Americans just to accommodate industry needs. I say all Americans because all Americans will be affected by either the siting or the transportation of this deadly waste.

The nuclear industry wants the government and the taxpayers to fix their problem. Their problem is a political one, it is not a technical one. They want to avoid their responsibility to face their regulatory commissions, and their ratepayers, to justify their business needs. They want the spotlight off their industry, and for this they are willing to put waste on our highways, our railways, and even in our backyards.

Most of the nuclear waste in the United States is in the East. And I am sure everyone here has learned, even though it is a new Congress, that Nevada is in the West. Forty-three States——

Mr. MYERS. Is that close to Las Vegas?

Senator REID. Forty-three States are at risk from the premature unnecessary transportation of spent nuclear fuel across the Nation. If an interim storage facility is put in the West, we will soon see at least, I repeat, Mr. Chairman, at least 2,000 tons of waste being moved unnecessarily across our heartland each year. This process will involve thousands of shipments of nuclear waste across our Nation each year. Each shipment provides the potential for a serious accident.

Although the probability of an accident may be low, the consequences are very high. The risk to towns all across America is unnecessary. And to the risk the moving of this waste prematurely to Nevada, we can add the additional hazard of moving waste from Nevada when Yucca Mountain proves to be an unsatisfactory permanent disposal site.

However, there is a legal, safe, and practical solution to all the waste being generated today. The Nuclear Waste Review Board finds no technical advantage to centralized interim storage. The

Nuclear Regulatory Commission, NRC, has and will license dry cask storage at the reactors. The NRC has stated this is safe and cost effective for over 100 years.

Additionally, the courts have ruled that the NRC has the authority to license dry cask storage without additional NEPA review. The NRC's only concern is with dry cask storage at a reactor that is no longer operating. That is the only concern they have, and they said that is a slight one. This is not an urgent problem. It is surely not the type of problem that justifies any legislating on appropriation bills.

We have spent at least $2.5 billion, I think closer to $3 billion now, and we have nothing to show for it. Nuclear waste is a multibillion-dollar business, and if we do not have the stomach—I will not go into more detail there, Mr. Chairman, but I think this is being jammed down our throat. The issue now is not what has been spent, but is it worth hundreds of millions and billions of dollars in the next few years to know if we can safely build a facility at Yucca Mountain. If not, we should stop.

Complaints about past expenditures generally indicate a mistaken framing of the issue. The measure of success is not how far along is the repository, but how much have we learned about our ability to build a safety repository and the systems to get the waste to the repository.

The 1982 and 1987 waste policy laws were focused on outlining what needs to be done to determine suitability or licensability, not how to build a repository as fast or cheaply as possible. We need to keep this in focus. Congress' expression of concerns about spending billions of dollars and finding this site unacceptable are sometimes disconcerting. Have we already lost our focus and objectivity?

Congress must be prepared to abandon Yucca Mountain and perhaps, ultimately, deep geological burial if scientific studies show it cannot be done safely, regardless of how much we have spent reaching that conclusion. In fact, the crime would be spending all that money just to admit we didn't care about the answer and were prepared to go ahead in any case.

Mr. Chairman, Nevada is the wrong choice for interim storage of nuclear waste. Nevada is not a cost-effective solution as it is far removed from the source of the waste. Also, it has no rail line to ship the waste and no infrastructure for handling the waste. Nevada is not a timely solution to the industry needs.

Additionally, an interim storage facility cannot be built by 1998. We all know that. Interim storage of nuclear waste in Nevada conflicts with the higher priority of finding a permanent disposal site. Not only would it compromise the credibility of the site characterization process, but it would generate an institutional momentum to accept a deficient site. Interim storage would be bad for the Nation and bad for Nevada.

I would hope that when this committee takes up the issue of funding interim storage at Yucca Mountain that it looks at the whole picture. If we keep our focus on that and not what the industry says they need, I think we will be okay. In short, Mr. Chairman, interim storage should be dry cask storage at the reactor sites. NRC has said it is safe and there are many experts that have said it is safe.

There has been a series of hearings at the University of Nevada, conducted by the academic community, and they have not always sided with Senator Bryan and I on nuclear waste, but, clearly, the latest person they had speaking there just this past week, a man by the name of Paul Slavic, a professor at the University of Oregon, says that we are in a big rush for nothing.

We are willing, as a State, to take our chances with a permanent high level repository because we think the scientific studies are going to show that it is not acceptable there. But at least let us go through the scientific process and not jam this interim storage down our throats, which at this stage, unless we change the law, would be illegal, and I think for the Nation, even if it were not, it would be shortsighted.

Mr. MYERS. Well, thank you very much for your testimony.

[The statement of Senator Reid follows:]

STATEMENT BY SENATOR HARRY REID
(House Energy and Water Appropriations Subcommittee)
February 29, 1996

MR. REID. Mr. Chairman, Thank you for the opportunity to appear before this committee today. I am here to oppose funding for Interim storage of nuclear waste at Yucca Mountain.

What we are doing here is racing to fix a non-existent problem. Why are we being pressed to go full throttle with Interim storage of nuclear waste? Because the nuclear industry and their handlers in the Congress are creating an imaginary crisis in an attempt to solve their commercial problem. This is another attempt by a specific industry to get the federal government to provide a solution to a political dilemma. The imaginary crisis is the storage of spent reactor fuel at operating reactors. There is no crisis.

Mr. Chairman, this is not a problem that requires a 1998 decision. Essentially, we have been asked to throw out well established protections for 250 million Americans just to accommodate industry needs. I say all Americans because all Americans will be affected by either the citing or transportation of this deadly waste. The nuclear industry wants the government and the taxpayers to fix their problem. Mr. Chairman, their problem is a political one, it is not a technical one. They want to avoid their responsibility to face their regulatory commissions, and their ratepayers, to justify their business needs. They want the spotlight off their industry and for this they are willing to put waste on our highways, our railways, and in our backyards.

Most of the nuclear waste in the United States is in the East, Nevada is in the West. Forty-three states are at risk from the premature unnecessary transportation of spent nuclear fuel across the nation. If an interim storage facility is put in the West we will soon see 2000 tons of waste being moved, unnecessarily, across our heartland each year. This process will involve thousands of shipments of nuclear waste across our nation each year. Each shipment provides the potential for a serious accident. Although the probability of an accident may be low, the consequences are very high. Mr. Chairman, the risk to towns across America is unnecessary. And to the risk of moving waste prematurely to Nevada we can add the additional hazard of moving waste from Nevada -- when Yucca Mountain proves to be an unsatisfactory permanent disposal site.

However, there is a legal, safe, and practical solution to all of the waste being generated today. The Nuclear Waste Review Board finds no technical advantage to centralized interim storage. The Nuclear Regulatory Commission (NRC) has and will license dry cask storage at the reactors. The NRC has stated that this is safe and cost effective for over 100 years. Additionally, the courts have ruled that the NRC has the authority to license dry cask storage with out additional NEPA review. The NRC's only concern, and it is slight concern, is with dry cask storage at a reactor that is no longer operating. That is not an urgent problem. It is surely no the type of problem that justifies any legislating on appropriations bills.

Mr. Chairman, we have spent $2.5 billion dollars and what do we have to show for it? Nuclear waste disposal is a multi-billion dollar business. If you don't have the stomach for such big tasks we should just get out of the business. A permanent deep geological repository is worth, probably, $10 billion, if you could just buy one, or sell one on the open market.

The issue now is not what has been spent, but is it worth hundreds of millions of dollars for the next few years to know if we can safely build a facility at Yucca Mountain. If not, let's stop.

Complaints about past expenditures generally indicate a mistaken framing of the issue. The measure of success is not how far along is the repository, but how much have we learned about our ability to build a safe repository and the systems to get the waste to the repository.

The 1982 and 1987 waste policy laws were focused on outlining what needs to be done to determine suitability or licensability, not how to build a repository as fast or cheaply as possible. We need to keep this focus. Congress' expression of concerns about spending billions of dollars and finding this site unacceptable are very disconcerting. Have we already lost our focus and objectivity?

Congress must be prepared to abandon Yucca Mountain, and perhaps ultimately deep geological disposal, if scientific studies show that it cannot be done safely -- regardless of how much we have spent reaching that conclusion. In fact the crime would be spending all that money, just to admit that we didn't care about the answer and we were prepared to go ahead in any case.

Mr. Chairman, Nevada is the wrong choice for interim storage of nuclear waste. Nevada, is not a cost effective solution as it is far removed from the source of the waste. Also, it has no rail line to ship the waste on and no infrastructure for handling the waste. Nevada is not a timely solution to the industries needs. Additionally, an interim storage facility cannot be built by 1998. Interim storage of nuclear waste in Nevada conflicts with the higher priority of finding a permanent disposal site. Not only would it compromise the credibility of the site characterization process, but it would generate institutional momentum to accept a deficient site. Interim storage would be bad for the nation and bad for Nevada.

I would hope that when this committee takes up the issue of funding interim storage at Yucca Mountain that it look at the whole picture. If we keep our focus than we may discover that the storage of nuclear waste is kept as far away from the political arena as possible. Again, Mr. Chairman, thank you for this opportunity to come before this committee.

UNITED STATES SENATOR FOR NEVADA

HARRY REID

FOR IMMEDIATE RELEASE

DATE: Thursday, February 29, 1996
NUMBER: 96-29
CONTACT: Susan McCue/202-224-3542

REID: LEAVE NUCLEAR WASTE ON-SITE

WASHINGTON -- U.S. Senator Harry Reid took a preemptive strike against the nuclear industry today when he urged a House appropriations panel to rule out allocating any funds for a temporary nuclear waste storage facility.

"The Nuclear Waste Review Board has found there is no technical advantage to centralized, interim storage," Reid testified. "The legal, safe, and practical solution is to leave the waste right where it is, on-site, in dry cask storage, where scientists confirm it can safely remain for the next 100 years."

The House Energy & Water Appropriations Subcommittee held a hearing this afternoon to review funding of federal energy and water programs. Reid testified that no money should be earmarked for a temporary nuclear waste storage site. He called the idea a taxpayer boondoggle and threat to public safety.

As work on a permanent waste repository at Yucca Mountain remains mired in politics and scientific dispute over safety, the nuclear industry and their friends in Congress are stepping up their push for a temporary center at the Nevada Test Site.

"When we can leave the waste safely on-site, why are we being pressed to transport and consolidate the deadly debris into a big, temporary holding pit?" Reid asked. "It is a needless risk to Nevada and all the states through which the waste would be transported.

"The nuclear utilities and their cronies are creating an imaginary crisis to solve their commercial problems."

At today's hearing, Reid also said Congress should be prepared to accept findings that Yucca Mountain is unsuitable for waste storage.

"The intent of the 1982 and 1987 waste policy laws was to determine the suitability and safety of a site, not to plow ahead with work on a repository regardless of consequences," Reid said. "Congressional concern about spending billions of dollars and finding Yucca Mountain unacceptable run counter to the intent of our laws. However, if Yucca is determined not suitable, then let's stop spending."

--end--

Mr. MYERS. As we are all aware, it is a problem that will not go away. We have to find some solution, so we will be certainly pleased to hear from you and do the best we can.

Mr. RIGGS. Mr. Chairman, would it be appropriate to ask both Senators where they believe we will ultimately be able to site a permanent waste storage facility?

Senator BRYAN. I want to respond. I think Senator Reid made the point, and I quite agree, and we are cosponsors of legislation that would amplify this, but on site storage—

Mr. RIGGS. Permanently.

Senator BRYAN. Permanent on-site storage, that provides a window of opportunity for 100 years. A hundred years. With all due respect, I don't think any of us can anticipate what the science or technology of the next century may bring.

I think if we look over the previous 100 years, the technological and scientific advancements of this country have been, I suppose, beyond the comprehension of any of our predecessors who lived a century ago. That provides an interim mechanism for 100 years. There may be a totally different technology available and a totally different concept involved which would make geological burial totally obsolete and unnecessary even in terms of permanent disposition.

Mr. RIGGS. Do you see any credence for that from the scientific community?

Senator BRYAN. No one has ever suggested in the next century there would be no technological advances. It would be a little like in the latter part of the last century it was suggested the Patent Office be closed because all of the scientific inventions that could be developed had, in fact, been processed.

We all anticipate that there are going to be some technology changes. And whether it is transmutation or whatever technology that may be potentially available for the disposal of nuclear waste, there is no rush to judgment here.

Senator REID. Congressman Riggs, also, if I could just add to this, look at the progress we have made since 1982 when we started this process of trying to site geologically the nuclear waste. Dry cask storage is a perfect example of the progress we have made, and we did that kind of by accident. It was done as a result of trying to figure out a safe way to transport this poison.

As a result of their trying to figure out a safe way that they could transport it, people said, if you can transport it safely in these, wouldn't it even be safer to put these spent fuel rods in these dry cask storage containers and leave them where they are; and somebody said, yes, that is what we should do. So there is a lot of the scientific community that deals with nuclear waste that says that we should leave it where it is, just put it in these dry cask storage containers.

Mr. MYERS. When the discussion first came up a few years ago, there was a plan for a monitored retrievable storage, probably as many as two, and because of the cost that was taken out of the consideration back then.

Senator REID. I am not sure it was only the cost. We had the State of Tennessee, you had Jim Sasser, Chairman of the Budget Committee, and a few other problems.

Mr. MYERS. We had five sites under consideration and you won. Or lost. I don't know what you want to call it. But we do have a real problem.

And, of course, some countries have solved part of that problem by reprocessing. I think this is something we have to give some consideration to.

Senator REID. Absolutely.

Senator BRYAN. Mr. Chairman, as you know, no country has made a decision with respect to the permanent process. None have approached it with the definitive 1997–1998 deadlines. And I know you are very familiar with this issue.

I had occasion to go with our distinguished colleague who chairs the Senate Energy Committee, Senator Murkowski, and whether you go to Britain or France or wherever, none of them have said by 1998 we will do this or that. None of them have made a decision with respect to the permanent disposition at this point.

Mr. MYERS. Japan is giving it some consideration at this point but they are probably the closest.

Senator BRYAN. Yes.

Mr. MYERS. We will certainly take up your advice.

Senator BRYAN. Thank you for your courtesy.

Senator REID. Thank you.

THURSDAY, FEBRUARY 29, 1996.

RENEWABLE ENERGY RESEARCH, DEVELOPMENT, AND DEMONSTRATION

WITNESS

MICHAEL L. MARVIN, DIRECTOR, GOVERNMENTAL AND PUBLIC AFFAIRS, AMERICAN WIND ENERGY ASSOCIATION

Mr. MYERS. Michael Marvin is director of Governmental and Public Affairs of the American Wind Energy Association.

Mr. Marvin, your prepared statement will be placed in the record and for 5 minutes you may proceed as you like.

Mr. MARVIN. I appreciate the opportunity for the sixth year in a row to address the subcommittee and address the chairman and ranking Minority member. We have not always agreed on each and everything on priorities of renewable energy development, but we have always deeply respected the consideration that each of you on the subcommittee has given over the years.

As to wind energy, first the good news, I think. In the last 15 years we have seen costs decline in the neighborhood of 80 to 90 percent. This has been a DOE-driven program and bringing costs down, as you have heard earlier this afternoon from 30 cents down to between 4 and 6 cents, and I think the success of that is indicative in the international market, as we have seen for the second year in a row another 40 percent annual increase in the international market to a level of $1.5 billion—again, the highest ever.

Of course, there is now the not so good news. In the United States the domestic market is very much stagnated, and we see utility restructuring initiatives in 33 States and, in the Federal Government, in the Commerce Committee and the Senate Energy Committee. That has discouraged utility executives from investing in technologies that might have higher prices in the very first years, even though over a life cycle over a 20-year contract price you would see that the price of that electricity as being much more competitive.

Of course natural gas prices do remain at an extremely low level, which makes it difficult for a new technology really to make an entry into the market.

So what we have is an exploding worldwide market, a somewhat stagnant domestic market, and a DOE program that is meeting and exceeding its stated goals.

We believe in fiscal year 1997 a budget of $52.5 million would allow the National Wind Technology Center to procure the equipment necessary to test and certify new turbines that are beginning to enter the market. It would allow for the basic research on aerodynamics, mechanical fatigue, and other key areas. It would allow utilities to continue working with NREL and the wind companies to field test the turbines that have been developed, and it would allow continuation of the innovative next generation turbine program.

My testimony provides much more detail on some of the key provisions of the wind budget request, but I will not regurgitate that message. I want to identify one piece in the budget which NREL, I believe, will be proposing the purchase of a dynamometer, a 1.5 megawatt dynamometer, a machine used to test the different components of a turbine.

So in this purchase the NREL will be able to test the structural soundness of the mechanical components of a wind turbine—the gear box, the generator, and the drive train—and that dynamometer will be able to simulate 20 years' worth of field testing in a matter of months.

It is also very expensive for one company, and certainly no companies in the U.S. industry are in a position to purchase that. But with the purchase of that, it will allow for the certification of the turbines and allow for greater entry and rapid entry into the international markets in a changing, highly competitive market. This is the kind of investment we believe merits the attention of the subcommittee.

We expect the budget resolution in a month or more. It is certainly uncertain at this point but unlikely that the 602(b) allocations will do anything but remain stable or perhaps go down. I know that the subcommittee and its staff have a detailed understanding of each of the programs, the successes and the failures and the general effectiveness. But I think as your job gets more and more difficult, I hope you will indulge me by perhaps offering a few additional suggestions as you have to, in effect, make reductions in programs that you like because of finite dollars.

I had three suggestions for questions that could perhaps be asked. First, can the industry get along without it? For example, industries that may have a larger market share have a developed infrastructure. They may be able to sustain those R&D programs better than a new or emerging company or technology.

Second, does the Government receive benefits that are more difficult to quantify from this investment? And I think for wind energy the answer is undoubtedly yes, we see general agreement;

Americans want a clean and cleaner environment. But the real disagreement comes then when we attempt to install command and control regulations—a stricter Clean Air Act, et cetera. These are the difficult choices that we have to make.

When a technology comes along with relatively minor Federal investment and we find that the technology itself helps to solve the solution without the command and control regulations, then it offers that additional benefit that I think is worth recognition.

And third: Does the public want it? We know the public is driving. It very strongly supports a balanced budget amendment. We also know that in any poll taken over the last 5 years, whether Republican, Democrat, or independent, that the highest priority of the American people is renewable energy development within energy priorities.

These are additional criteria I think should be considered as just that, additional. I am sure the committee's core criteria will continue, whether this represents the best possible investment of ever scarcer Federal dollars, and I do believe the wind program has accomplished a great amount in any measure—price, efficiency, capacity, availability—and I hope that it merits the committee's continued support.

Thank you.

Mr. MYERS. Thank you very much for your fine testimony.

[The statement of Mr. Marvin follows:]

American Wind Energy Association

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Testimony of the

American Wind Energy Association

before the

House Appropriations Committee
Subcommittee on Energy and Water Development

on Fiscal Year 1996 Budget Recommendations

The Honorable John Myers, Chairman

February 29, 1996

Presented by Michael L. Marvin
Director, Governmental and Public Affairs
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ABOUT THE AMERICAN WIND ENERGY ASSOCIATION

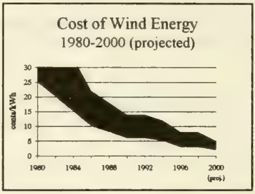
The American Wind Energy Association, AWEA, was formed in 1974. It represents virtually every facet of the industry, including turbine and component manufacturers, project developers, utilities, academicians and interested individuals. AWEA has nearly 700 members from 48 states.

SUMMARY OF TESTIMONY

The American Wind Energy Association respectfully requests an appropriation of $53.5 million for wind energy research and development for fiscal year 1997. These levels would allow an increase in core research activities, stronger technology validation, more focused turbine research and a more comprehensive testing and certification program for the United States. Budget reductions of 32 percent made in FY 1996 (compared to the FY 1996 Administration request) are beginning to have a negative effect on efforts to achieve efficiency and price goals set by the Department of Energy. With Congressional support of DOE wind program funding levels, the U.S. wind industry believes it can reach the stated target of 2.5 cents per kilowatt-hour (in 15 mph winds) by the year 2000.

STATE OF THE INDUSTRY

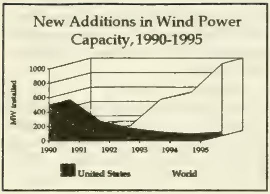
Working with the Department of Energy, the U.S. wind industry has achieved **cost reductions of more than 80 percent** over the past 15 years (see graph, right). These efficiencies have come through stronger designs, more rigorous testing in the laboratory and the field, and through the experiences gained through the generation of roughly 3.5 billion kilowatt-hours of electricity per year.


Cost of Wind Energy
1980-2000 (projected)

Electric utilities working most directly to develop wind energy projects include:

- Portland General Electric (Ore.)
- PacifiCorp (Wyo., Colo., Ore., Utah)
- Northern States Power (Minn., S. Dak., N. Dak.)
- Lower Colorado River Authority (Texas)
- Texas Utilities (Texas)
- Central and South West Corp. (Texas)
- Green Mountain Power (Vermont)
- Sacramento Municipal Utility District (California)

Despite continuing reductions in cost and increases in efficiencies, the domestic market for wind energy has stagnated, due principally to historically low natural gas prices and the uncertainty surrounding electric utility restructuring. Worldwide, the use of utility-scale wind



energy is exploding; in 1994, the market exceeded $1 billion for the first time, setting a record. Last year, that record was shattered, with nearly 1,300 megawatts installed and more than **$1.5 billion in sales**. There is no indication that the non-U.S. markets show any signs of waning, as countries such as Germany, Spain, China and India continue aggressive expansion plans. The challenge for U.S. industry is competing in the worldwide market in the absence of a definable domestic market and dramatic reductions in the prices paid for wind-generated electricity in California (where the bulk of the U.S. wind market is located).

CORE COMPONENTS OF THE DOE WIND RESEARCH PROGRAM

Next-generation Wind Turbine

Key to the success of the U.S. industry is working with DOE and the National Renewable Energy Laboratory (NREL) to develop and test new, larger turbines designed for the expanding export market and the slowly developing domestic market. These larger turbines may also have applications in replacing first-generation turbines emplaced in the early 1980s, since one new turbine can replace as many as 25 older turbines (owing to larger size, lower costs and higher efficiencies).

In Fiscal Year 1995, DOE began field testing prototype next-generation turbines at the National Wind Technology Center (NWTC), including the AWT-26 (designed by AWT, Inc., of Washington and owned by FloWind Corp. of California) and the AOC-50 (designed and produced by Atlantic Orient Corp. of Vermont). During the current fiscal year, the NWTC will continue testing subsystems and components such as generators, blades, and braking and control systems.

FY 1997 offers the expectation of completing prototypes of three innovative, utility-grade (large-scale) wind turbines. Negotiations are continuing with Zond Corp. (California), Kenetech (California) and The Wind Turbine Company (Washington) to design, construct and test turbines ranging in capacity from 500 kilowatts to 1,000 kilowatts each. This flagship program continues to be the best hope of quickly and successfully penetrating the electric generation market.

We have witnessed the stagnation of the domestic market and the simultaneous explosion of the international market. The realities of regaining U.S. competitiveness in this global market means that the technology must not only be better, but markedly better.

Why? Massive government subsidy programs in countries such as Denmark and Germany ensure that companies from those nations, when travelling to a major foreign market such as India, will be in a position to offer lucrative deals underwritten by their respective governments. Similar support from U.S. agencies, although growing, is no measure against such aggressive export programs. To successfully negotiate business opportunities requires creative deal-making and the best quality turbines in the world.

The Department of Energy has stated its goal for these innovative turbines: generating electricity at a price of **two-and-a-half cents per kilowatt-hour in 15 mile-per-hour wind regimes by the year 2000**. It was only five years ago when the goal of the industry and the DOE was a turbine capable of generating electricity for five cents per kilowatt-hour. With outstanding cooperation between the wind companies and the federal government, that goal was met -- ahead of time and under budget.

But the electricity generation market has changed rapidly in the past five years. Today, utility restructuring initiatives at both the state and the federal level have discouraged utility executives from venturing into newer technological innovations such as wind which have higher costs in the short term. This, combined with historically low natural gas prices, has created a **hostile domestic energy market** at just the time the industry was becoming competitive.

The wind industry stands at a cross-roads. Utility researchers such as the Electric Power Research Institute have said **wind will likely be the cheapest way to generate electricity** early next decade. Yet forces outside the control of the American wind industry have converged to threaten the very existence of a broad U.S-based wind energy industry. This occurs despite successive record-smashing years of wind energy sales overseas.

National Wind Technology Center and Testing Initiatives

The National Wind Technology Center (NWTC), located near Rocky Flats, Colorado, already is proving itself to be a **world-class research and development center**. Opened in 1994 under the direction of NREL, the Center has made a strong impression internationally, and represents a powerful statement by the U.S. Government that this country is not ceding the multi-billion dollar wind energy markets to its international competitors. Given the buffeting U.S. wind companies have taken in the past half-decade, this clarion call could not have been better timed.

The value of the NWTC is multiplied many-fold in a small but emerging technology sector where access to research and development capital is limited: equipment that is too costly for any single company can be centrally-located where U.S. companies can have access to that equipment. With that multi-company access, the federal taxpayer is getting a powerful return on investment because multiple tests--cost-shared by the companies--can help pay for the equipment and help reduce the sometimes overwhelming costs of technology performance verification.

An excellent example is the soon-to-be-acquired 1.5 Megawatt dynamometer, a machine that can provide rigorous testing of gearboxes, generators, converters, drivetrains, controls, brakes and general fatigue in a laboratory setting. The dynamometer allows mechanical component testing in a rapidly accelerated timeframe: **the simulation of 20 years in the field can be accomplished in a matter of months**.

With that purchase alone NREL, through the NWTC, can provide state-of-the-art dynamometer capability for the industry, can support in-house research, can create a full-scale simulation and design validation and can support certification testing of U.S. turbines. Absent certification, many American turbine developers are finding much of the $1.5 billion a year international marketplace out of their reach.[1]

Although the dynamometer is by no means the only example, it is the best example of how we believe the federal government and small companies in an emerging field can work in tandem to enhance U.S. competitiveness for the 21st century.

Applied Research

Much of the focus of the applied research program focuses on the development of models to help better understand aerodynamics (through wind tunnel tests), fatigue damage prediction and structural reliability capabilities. Modeling and code design activities are underway at both NREL and Sandia National Laboratory.

Blade design programs continue to result in larger, more efficient, and quieter rotor systems that are critical to capturing more energy from turbines located in lower wind speed areas. Although some wind power plants can be sited today for well under five cents per kilowatt-hour, these plants are generally located at sites with excellent wind regimes. Creating a competitive wind plant in areas of the country with good (but less than excellent) wind regimes will open up markets in the midwest, southwest and northeast that were previously unattainable.[2]

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[1] A compelling example is the AWT-26 turbine, part of the Advanced Wind Turbine program. Despite winning national awards for design excellence, a requirement that wind turbines be certified before being eligible for the massive energy market in India is making market entry difficult--despite the fact that the company has signed contracts to deliver power. The U.S. has not yet established certification testing, although the industry is working with DOE to develop certification criteria.

[2] The same theory applies to international markets. An examination of wind speeds around the world shows markets increase exponentially as turbines are able to cost-effectively generate power in Class 3 (14.3 mph at 50 meters) and Class 4 (15.7 mph at 50 meters) winds.

Hybrid, International and Agricultural Programs

Much of the attention in the wind program is focused on the utility-scale turbine development and testing activities. But smaller (300 W to 50 kW) turbines can address niche market needs as well as or better than any technology. In fact, according to NREL, small wind is the cheapest option for tens of thousands of villages compared to transmission grid extension or diesel generators.

NREL has worked closely with a number of wind companies to encourage less-developed countries in Central and South America and the Far East to utilize wind energy in areas that lack a central transmission grid. More than **two billion people in the world lack access to electricity** or to their nation's electric grid. The opportunities for small turbines to electrify villages and pump water for both human, grazing and agricultural uses is only now being fully understood.

There is a huge worldwide market opportunity in diesel generator replacement alone.[3] The scores of villages which have diesel generators as their sole power source often find themselves unable to either repair the generators when they are down or to have hard capital available to purchase fuel, leaving the generators as white elephant reminders of failed energy policies. Small turbines which operate on principles of near-100 percent availability and simple design (leading to easier maintenance and repair) are ideal matches for many of these villages.

Conclusion

There is virtually no argument that the use of **wind energy for utility-scale electricity generation will continue to expand both here and abroad**. The question we are faced with is the role of the U.S. industry in that market. The industry is proving itself as one of the leading contenders to produce the cheapest electricity from any source, yet the domestic markets stagnate, and domestic wind companies are suffering because of it. The financial strength of the industry belies its successes and its potential. Through a continued partnership with the Department of Energy, the U.S. wind industry can develop the best-designed, least-expensive turbines in the world, and help the U.S. toward a **positive trade balance** in energy and electricity.

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[3] Representatives of the Mexican national utility have said publicly that small wind turbines and wind-pv hybrid systems represent the only technically and economically feasible way to bring power to the 100,000 unelectrified villages in Mexico.

THURSDAY, FEBRUARY 29, 1996.

DOE APPROPRIATIONS

WITNESS

MARVIN MCKOY, THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

Mr. MYERS. Marvin McKoy, Institute of Electrical and Electronics Engineers.

Mr. McKoy, your prepared statement will be placed in the record and you may proceed in any way you care for the next 5 minutes.

Mr. MCKOY. I will be brief with you so we will, hopefully, make a few Brownie points that way.

Mr. MYERS. You sure can.

Mr. MCKOY. I work for the Georgia Power Company. I work in our Olympic project management staff, but today I am here representing the Institute of Electrical and Electronics Engineers, U.S. activities. We represent the 220,000 members of the IEEE in the U.S. in their technical policy issues as well as their career interests.

To make our statement very brief, we want to reiterate our support for Federal energy R&D programs. We believe these are a strategic investment in the future of the United States. It helps us maintain our competitive edge and gives us export opportunities, and it also lessens our dependence on foreign oil.

So as you go through your deliberations, we ask that you balance the strategic investment aspects of Federal R&D programs with the need to reduce the Federal budget and fund these programs at the appropriate level that you feel necessary. And, as always, we feel very proud of the past and what we have received from this committee, and we would like to continue that relationship.

Mr. MYERS. Thank you for your brevity and your statement. We will take that into consideration.

[The statement of Mr. McKoy follows:]

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STATEMENT

of

Marvin McKoy
Chairman, Energy Policy Committee

of the

Institute of Electrical & Electronics Engineers-
United States Activities

to the

U.S. House of Representatives
Energy and Water Development Appropriations Subcommittee

on the

FY 1997 Department of Energy Budget Request

February 29, 1996

◆ The Institute of Electrical and Electronics Engineers, Inc.◆
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Mr. Chairman and members of the Committee, my name is Marvin McKoy. I work for Georgia Power Company on the Olympic Project Management Staff. Today, I am here representing the Institute of Electrical and Electronics Engineers-United States Activities (IEEE-USA) as Chairman of its Energy Policy Committee. The IEEE is a transnational professional society whose 320,000 members live and work in more than 130 countries throughout the world. The IEEE-USA promotes the technology policy and professional career interests of the IEEE's 220,000 U.S. members.

Reliable and affordable electrical power is essential for the United States. Our productivity, economic competitiveness, and quality of life depend on energy. We feel strongly that our overall energy goals should foster the development and deployment of energy production and conversion technologies that will increase the efficiency of U.S. energy utilization, improve environmental quality and support U.S. competitiveness. Research and development of alternative energy allows the U.S. to maintain its technological edge over our competitors, provides export opportunities, and lessens our dependence on foreign energy sources.

Unfortunately, Federal funding for energy R&D programs has been severely cut back. We recognize and understand the need to balance the Federal budget. Priorities need to be set. However, the Energy R&D programs are strategic investments in the future of the U.S.

Solar and Wind energy system are approaching commercial viability. Other alternative energy programs, such as fusion, are long term, non commercial R&D projects with tremendous potential for our country. New discoveries, new applications, and technology spin-offs are a few of the benefits. These advances would not have been possible without the leadership and support of Congress. The continued support of these programs is vital to our leadership in this field.

We ask, during your deliberations on the FY97 Energy and Water Appropriations bill, that the strategic importance of Energy R&D programs be balanced with an appropriate level of investment. We thank you for your past support. We in IEEE-USA stand ready to provide technical information to assist you in your role.

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THURSDAY, FEBRUARY 29, 1996.

RENEWABLE ENERGY PROGRAMS

WITNESS

JAIME STEVE, WASHINGTON REPRESENTATIVE, UNION OF CONCERNED SCIENTISTS

Mr. MYERS. Jaime Steve, Washington representative of the Union of Concerned Scientists.

Mr. Steve, your statement will be placed in the record and you may proceed for the next 5 minutes as you like.

Mr. STEVE. Good afternoon.

My name is Jaime Steve, and I serve as the Washington, D.C., rep for the Union of Concerned Scientists. UCS is a public interest organization here in town dedicated to advancing responsible public policies in areas where science and technology play a critical role. Thank you for the opportunity to testify.

Before jumping into specific budget numbers and programs, I would like to sincerely thank two members of this panel, Mr. Riggs and Mr. Fazio, for joining the brand new House Renewable Energy Caucus just recently established by Chairman Dan Schaefer from Colorado. Other key members of the panel, or key members who helped form the panel, are Representatives Klug, Richardson, Salmon, Thurman, Ehlers, and Minge.

Members of this panel may be aware that Chairman Schaefer will formally launch the Renewable Energy Caucus at a reception on Wednesday, March 6, in room 2325, Rayburn.

Jumping right into the fiscal year 1997 budget, UCS urges this panel to approve the 1998 renewable energy budget request that approximates the fiscal year 1995 funding level adopted by Congress. This would place fiscal year 1997 renewables funding at approximately $400 million.

Yes, I am another person coming up asking for money, but I am also a person who will suggest where it can be found. This can be accomplished while also reducing the overall DOE budget, specifically by cutting at least $65 million from DOE's Fusion Energy Program.

Mr. MYERS. He is meddling now, isn't he?

Mr. STEVE. My apologies, Mr. Frelinghuysen.

UCS supports increased funding for research and demonstration of all forms of clean, renewable energy that have been represented here today for the following reasons, which are economic reasons, rural and industrial development reasons, national energy security reasons, and, of course, environmental.

First, Federal R&D investments have brought renewable energy technologies to the verge of commercial success. You have heard the wind example: 80 to 90 percent reductions in the cost of these technologies.

Second, commercial successes for renewables within the U.S. will spur economic growth by creating thousands of new jobs, many of them in manufacturing and many in rural areas seeking economic redevelopment.

Furthermore, instead of allowing over $50 billion a year to flow out of our country to purchase imported fuel, that money could and should stay here in the United States to help provide U.S. manufacturing jobs for renewables and agricultural production.

Third, domestic commercial success for renewables will also help U.S. companies compete in this emerging market international market.

Fourth, commercialization of these technologies would provide assurance against gradual or sudden increases in the cost of fossil fuels—I am particularly talking about oil—which we had seen in the 1970s and again during the Persian Gulf War to a lesser extent.

While some may deem these energy price shocks as footnotes in history, many leading economic and energy analysts, including high-level officials at DOE, anticipate another serious oil price shock sometime in the next decade.

Lastly, and of equal importance with the economic and national security concerns, is the fact that renewable energy offers virtually pollution-free power with few or no emissions of smog-forming pollutants, like nitrogen oxides, acid-rain-forming chemicals like sulfur, and carbon dioxide gases, strongly linked to global climate change.

In short, renewable energy technologies, once commercialized, can help hold down the overall cost to taxpayers of preserving the environment and protecting people's health.

Let me jump quickly into biomass. You have heard various definitions of biomass. I have a brief one. Biomass is essentially any organic matter available on a renewable basis for conversion to energy. While biomass can also be used to produce transportation fuels and chemical products, I want to focus on DOE's efforts to commercialize technologies for converting biomass resources into low-cost electric power.

Electricity from biomass is particularly important right now because biomass crops can provide farmers with an additional high-value crop at the very time—today the House is voting on the farm bill—at the very time when changes in Federal agriculture policy are likely to begin removing traditional support for commodity crops such as corn and wheat.

Biomass has the potential to generate two-thirds of America's electricity needs, reduce net carbon dioxide in the atmosphere, reduce sulfur dioxide, and many other benefits. Biomass has a near-term potential to do all these things, and, as a direct result of Federal support over the past 3 years, the technology to do so is nearing commercialization.

However, for biomass to achieve its potential, it is essential that Congress provide a fiscal year 1997 budget closer to the wholly justified fiscal year 1996 administration request of $80 million.

The biomass program is of particular—the biomass power program is of particular importance. About 10 biomass power and ethanol power projects throughout the country are currently midway through demonstration. These projects, each of which requires industry to pay at least a 50–50 cost share, include projects in Vermont, two projects in Hawaii, Minnesota, Kansas, and Chariton Valley, Iowa.

Do you want me to sum up? Okay.

Without Federal support, most of the projects I have listed will not survive to prove their commercial viability and investments today will have been wasted. This would be a shame.

On average, each of these minimum 50–50 cost shares requires approximately $2 million over the next 2 to 3 years.

In conclusion, for every taxpayer dollar spent on renewable energy R&D, the Federal Government is providing America with rural economic revitalization, development of high-technology industries, increased national energy security, and a cleaner environment. I ask you to apply these criteria to all the programs that are under your jurisdiction.

Thank you again.

Mr. MYERS. Well, thank you, Mr. Steve.

We apologize to all of you. We have several hundred witnesses and we have to stay pretty close to schedule, so I hope you will understand.

[The statement of Mr. Steve follows:]

UNION OF
CONCERNED
SCIENTISTS

TESTIMONY OF JAIME STEVE, ESQ.

ON BEHALF OF

THE UNION OF CONCERNED SCIENTISTS

Subcommittee on Energy and Water Development
Committee on Appropriations
U.S. House of Representatives
February 29, 1996

Good afternoon. My name is Jaime Steve and I serve as Washington, D.C. representative for the Union of Concerned Scientists. UCS is a public interest organization dedicated to advancing responsible public policies in areas where science and technology play a critical role. I appreciate the opportunity to testify regarding the fiscal 1997 budget for renewable energy programs.

House Renewable Energy Caucus

Before jumping into specific budget numbers and programs I would like to sincerely thank Rep. Riggs (R-Calif.) and Rep. Fazio (D-Calif.) of this panel for joining the new House Renewable Energy Caucus launched by House Energy and Power Subcommittee Chairman Dan Schaefer of Colorado. Other key members in forming this information-sharing group are Reps. Klug (R-Wis.), Richardson (D-NM), Salmon (R-Ariz.), Thurman (D-Fla), Ehlers (R-Mich.), and Minge (D-Minn.). As members of this panel may be aware, Chairman Schaefer will formally launch the Renewable Energy Caucus at a reception on Wednesday March 6 at 10:00 a.m. in room 2325 Rayburn.

Overall Renewable Energy Budget Recommendation

Returning to the fiscal 1997 budget, UCS urges this panel to approve a fiscal '97 renewable energy budget that approximates the fiscal 1995 funding level adopted by Congress. This would place Fiscal '97 renewables funding at approximately $400 million, thus maintaining the steady and reasonable increases that began during the Bush Administration. This can be accomplished while also reducing the overall Department of Energy budget. Specifically, by cutting at least $65 million in DOE's fusion energy program.

UCS supports increased funding for research and demonstration of all forms of clean renewable energy represented here today -- including wind, solar, geothermal, hydro power, and biomass -- for the following economic, rural and industrial development, national energy security, and environmental reasons:

Washington Office: 1616 P Street NW Suite 310 • Washington, DC 20036 • 202-332-0900 • FAX: 202-332-0905
Cambridge Headquarters: Two Brattle Square • Cambridge, MA 02238 • 617-547-5552 • FAX: 617-864-9405
California Office: 2397 Shattuck Avenue Suite 203 • Berkeley, CA 94704 • 510-843-1872 • FAX: 510-843-3785

- First, Federal R&D investments have brought renewable energy technologies to the verge of commercial success. For example, since the early 1980's, the cost of wind power has fallen by 80 percent.
- Second, commercial success for renewables within the US will spur economic growth by creating thousands of new jobs -- many of them in manufacturing and many in rural areas. Furthermore, instead of allowing over $50 billion a year to flow out of our country to purchase imported fuel, that money could and should stay in the US, providing jobs in manufacturing renewable energy technologies and agricultural production of energy crops.

- Third, domestic commercial success for renewables also will help US companies compete in the burgeoning multi-billion dollar export market for renewable energy technologies. At least one-third of the world's population -- over 2 billion people -- do not have access to reliable electricity. Currently, most developing countries are turning to small-scale, clean renewable technologies to fill this need. The US is poised to become the supplier of choice to these countries, but not without continued federal investments to help finish building the foundation for renewables to flourish in the market.

- Fourth, commercialization of these technologies would provide insurance against gradual or sudden increases in the cost of fossil fuels, such as were seen in the 1970's and again during the Persian Gulf War. While some may deem these energy price shocks as footnotes in history, many leading economic and energy analysts, including high-level officials at DOE, anticipate another serious oil price shock sometime in the next decade.

- Lastly, and of equal importance with economic and energy security concerns, renewable energy offers virtually pollution-free power with few or no emissions of smog-forming pollutants like nitrogen oxide, acid rain forming chemicals like sulfur, and carbon dioxide gases strongly linked to global climate change.

In short: renewable energy technologies -- once commercialized -- can help hold down the overall cost to taxpayers of preserving the environment and protecting people's health.

Biomass R&D

While UCS supports all renewable technologies being considered by this panel, I would like to highlight biomass technologies, which offer great potential for producing jobs, revitalizing rural economies, and developing cleaner domestic sources of energy.

Biomass is essentially any organic matter available on a renewable basis for conversion to energy. This includes, agricultural crops and residues, commercial wood and logging residues, animal wastes, and the organic portion of municipal solid waste. Biomass resources, which may be solid, liquid, or gas, are derived from these raw materials, known as feedstocks.

While biomass can also be used to produce transportation fuels and chemical products, I want to focus on DOE's effort to develop and commercialize technologies for converting biomass resources into low-cost electric power. Electricity from biomass is particularly important right now because biomass energy crops can provide farmers with an additional high-value cash crop at the very time when changes in federal agriculture policy are likely to begin removing traditional federal support for commodity crops such as corn and wheat. Biomass in its many forms has the potential to:

- create at least 300,000 jobs, mainly in the agricultural sector;

- generate up to two-thirds of America's electricity needs;
- reduce net carbon dioxide (CO2) emissions by 90 percent;
- cut sulfur dioxide (SO2) emissions by 70 percent;
- reduce the country's solid waste disposal problem; and
- reduce federal payments to farmers under the Conservation Reserve Program (CRP), while preserving the soil conservation and wildlife habitat protection benefits of the CRP.

Biomass has the near-term potential to do all these things, and, as the direct result of federal support over the past three years, the technology to do so is nearing commercialization. However, for biomass to achieve its potential it is essential that Congress provide a fiscal 1997 budget closer to the wholly justified fiscal 1996 Administration request of $80 million for the entire biomass program (including biofuels, biopower, industrial uses, and the regional biomass program).

Biopower Program

The biopower program is of particular importance. About ten biomass power and ethanol-power projects throughout the country are currently mid-way through demonstrating the commercial viability of different power options. These projects -- each of which requires industry to pay at least 50 percent of the costs -- include:
1) the Vermont wood chip gasification power project; (Burlington, VT)
2) the Hawaii sugarcane gasification power project; (Maui, HI)
3) the Hawaii sugarcane gasification ethanol/power project;
4) the Minnesota alfalfa gasification project;
5) the Kansas switchgrass pyrolysis project;
6) the Chariton Valley (Iowa) switchgrass co-firing project;
7) the Niagara Mohawk (New York) willow co-firing project;
8) the Florida energy cane ethanol and power project;
9) the California sorghum-kenaf ethanol cogeneration project.
10) the California rice straw ethanol cogeneration project (Gridley, Calif.)

Need/Justification for Additional Investments

An increase -- placing these programs at roughly the fiscal 1996 administration request -- would support demonstrations of additional technologies and feedstocks. The technologies vary from co-firing with coal, to gasification with a combined cycle turbine, and combined ethanol and power production facilities. The feedstocks range from corn cobs to alfalfa, and from wood chips and sawdust to specially grown energy crops such as hybrid poplar trees, willows, and switchgrass. Many of these biomass resources are best developed in different parts of the country, therefore requiring targeted assistance in commercialization. For this reason, geographically dispersed demonstrations are the best method to develop new technologies, build regional markets, and accelerate commercialization.

Without federal support, most of the projects I have listed will not survive to prove their commercial viability and investments to date will have been wasted. This would be a shame, for these projects are aimed at proving their economic worth within the foreseeable future. On average, each of these minimum 50/50 cost share projects are likely to need approximately $2 million per year for the next two to three years. For the biopower program overall, we suggest at least $30 million for fiscal 1997 to fund the projects I have mentioned and other components of the biopower program.

Conclusion

For every taxpayer dollar spent on renewable energy R&D, the federal government is providing America with rural economic revitalization, development of high-technology industries, increased national energy security, and a cleaner environment. If you apply these criteria to each energy program under your jurisdiction, you will find that dollar-for-dollar there is no better bargain than renewable energy research and development.

Again, I thank you for the chance to share our views with you on these important programs. Thank you.

#

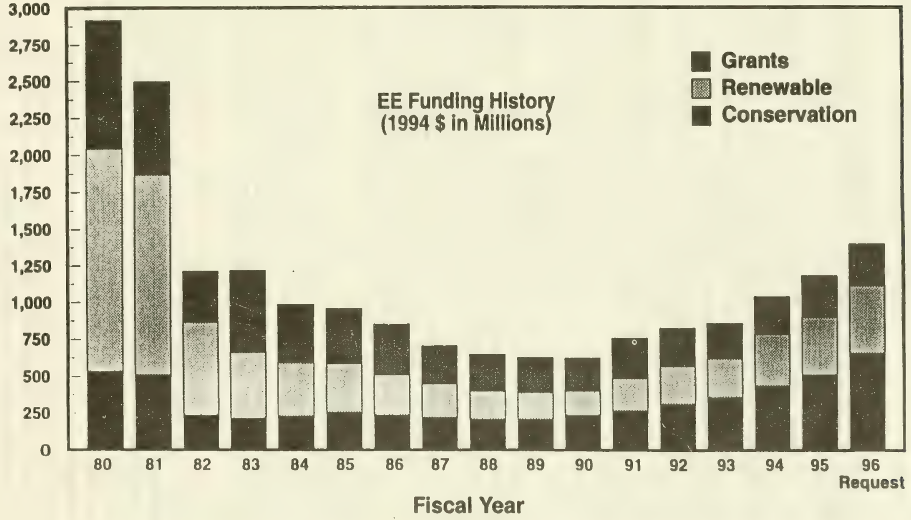
Members of the
House Renewable Energy Caucus
as of February 28, 1996

Dan Schaefer (R-Colo.)
Scott Klug (R-Wisc.)
Karen Thurman (D-Fla.)
Bill Richardson (D-N.M.)
David Minge (D-Minn.)
Vern Ehlers (R-Mich.)
Matt Salmon (R-Ariz.)
Victor O. Frazer (I-V.I.)
Gerald D. Kleczka (D-Wisc.)
Collin C. Peterson (D-Minn.)
Constance A. Morella (R-Md.)
David E. Skaggs (D-Colo.)
John W. Olver (D-Mass.)
Martin Olav Sabo (D-Minn.)
Maurice D. Hinchey (D-N.Y.)
Jim McDermott (D-Wash.)
Nathan Deal (R-Ga.)
Wayne Gilchrest (R-Md.)
Blanche Lambert Lincoln (D-Ark.)
Greg Ganske (R-Iowa)
Patsy Mink (D-Hawaii)
Carlos J. Moorhead (R-Calif.)
Frank Riggs (R-Calif.)
Roscoe G. Bartlett (R-Md.)
Joel Hefley (R-Colo.)

Organizations Supporting the
House Renewable Energy Caucus

American Energy Crop Association
American Solar Energy Society
American Wind Energy Association
Biomass Energy Alliance
Clean Fuels Development Coalition
Geothermal Energy Association
National Bioenergy Industries Association
National Hydropower Association
Passive Solar Industries Council
Solar Energy Industries Association

Energy Efficiency and Renewable Energy Budget
1980 - 1996



THURSDAY, FEBRUARY 29, 1996.

FUSION PROGRAM

WITNESS

STEWART C. PRAGER, CHAIR, DIVISION OF PLASMA PHYSICS, THE AMERICAN PHYSICAL SOCIETY

Mr. MYERS. Stewart Prager, chair of the Division of Plasma Physics, the American Physical Society.

Mr. Prager, your prepared statement will be placed in the record and for the next 5 minutes you may proceed as you like.

Mr. PRAGER. Thank you very much.

I am here to speak about the Fusion Energy Program.

Mr. MYERS. We just heard about it.

Mr. PRAGER. I heard, and I guess the American Physical Society is going to have a different opinion from the Union of Concerned Scientists.

I speak on behalf of the Division of Plasma Physics of the American Physical Society. I am chair of that division and also a physics professor at the University of Wisconsin.

The Division of Plasma Physics of the APS strongly supports research in fusion energy science, and I want to deliver two messages, and these messages are strongly resonant with the comments you heard this morning about the fusion program.

The first message is to stress the value of the program, and in particular I want to emphasize that the program is the prime sponsor of a basic field of science; that is, plasma physics. This is fundamental science of vast importance to the Nation's science and technology foundation.

The second point I will deal with concerns the new strategy for the foreseeable future, which you heard a bit about this morning. We are about to embark on a new program which is much leaner than in the past but which represents a significant and a very exciting alteration in our approach. So let me treat the first point first.

Plasma physics, you probably know, is a fundamental branch of science that just happens to draw its funding support from the fusion program. While plasma physics is the intellectual engine driving progress in fusion, its importance extends far beyond fusion. Its ideas and results affect research in astrophysics, complex systems, chaos, turbulence, scientific computing, and other areas.

Plasmas are pervasive in nature and in industry. They constitute most of the known matter in the universe, and they are also playing a large and expanding role in the electronics and material processing industries. For example, plasmas are used in the production of computer chips, tool hardening, advanced defense systems, lighting, and other things. Plasma physics is prototypical of fundamental science in the Nation's interest.

Thus, an important and fundamental field of science is dependent upon fusion energy funding. It is critical to the health of this field that funding, having just declined by perhaps more than any other basic science, must now be stabilized.

The second point is that the fusion community in the U.S. is ready to embark upon a rather new path. We recognize that we cannot afford to construct large facilities requiring increasing budgets. We must turn to a fusion program that remains at a level which is reduced from that of any time probably in the past 20 years.

We realize that the wisest path is one which emphasizes the basic science underlying fusion. The increased scientific focus that is planned is both exciting and necessary for the long-term progress in fusion energy. These realizations are the basis for a fusion program that is genuinely different than the past and, though small compared to the fusion efforts in Europe and Asia, continues to hold vital scientific excitement and technological promise.

However, it must be appreciated in 1 year the fusion science community received a dramatic 33 percent cut, causing the loss of many of our best young scientists and the shutdown of viable facilities. This cut was rather draconian and disproportionate and, in our opinion, wholly unjustified scientifically. We think we cannot now take a cut without devastating our endeavor and would urge you to hold the line and commit steadfastly to stable support of this extraordinary scientific endeavor.

In the past year, as you probably know, there have been two independent, high-level outside scientific reviews of the fusion program, one done by the President's Committee of Advisers on Science and Technology, and the other done by DOE's Fusion Energy Advisory Committee—FEAC. Both committees lauded the program's remarkable scientific progress as well as the enormous potential of fusion as a renewable energy source. Both noted the high importance to the Nation of fundamental plasma physics. Both recommended a strong basic scientific focus for the program.

Recognizing the fiscal realities, both committees described the dynamic program that made sense at funding levels which are less than fiscal year 1995. In particular, in this very last month, FEAC has recommended a funding level of $275 million. This is $90 million less than fiscal year 1995, and I strongly urge you to adopt this recommended funding level. It is time to save the Fusion Science Program, which is a field of major importance to the scientific health of the Nation and to our long-term energy security.

Thank you very much.

Mr. MYERS. Well, thank you very much for your fine testimony.

[The statement of Mr. Prager follows:]

FUSION ENERGY SCIENCE RESEARCH

Statement of
Stewart C. Prager
Chair, Division of Plasma Physics
American Physical Society*

to the
House Sub-Committee on Energy and Water Development

February 29, 1996

I wish to express, on behalf of the Division of Plasma Physics of the American Physical Society, strong support for the US fusion energy sciences program. The Division of Plasma Physics represents essentially all the plasma physicists and fusion researchers in the country. I speak to you as Chair of the Division, on behalf of the Chairs of the Division for the next two years, and as a physics professor at the University of Wisconsin.

Today, I will deliver two messages. The first will be to stress the value of the fusion program. In particular, I emphasize that the program is the prime sponsor of the scientific field of plasma physics, a fundamental science of vast importance to the nation's science and technology foundation. The second point concerns the new research strategy for the foreseeable future. We are about to embark on a new program which, though much leaner than the past, represents a significant and potentially exciting change in approach.

Plasma physics is a fundamental branch of science that draws its funding support from the fusion program. While plasma physics has been the intellectual engine driving fusion progress, its import extends far beyond fusion. Its ideas and results affect research in astrophysics, complex systems, chaos, turbulence, scientific computing and materials science. Plasmas are pervasive in nature and in industry. They constitute most of the known matter in the universe, and they are playing a large and expanding role in the electronics, power, and materials processing industries. For example, plasmas are used in the production of computer chips, tool hardening, advanced defense systems, and lighting. Indeed plasma physics is prototypical of fundamental science in the nation's interest.

Thus an important and fundamental field of science is dependent upon fusion program funding. It is critical to the health of the field of plasma science that its funding, having just declined by perhaps more than any other basic science, must now be stabilized.

The second point is that the US fusion community is ready to embark upon an entirely new path. The community recognizes that we cannot afford to construct large facilities requiring increasing budgets: we must turn to a fusion program that remains at a level reduced from that of any time of the past twenty years. Most importantly we have learned that the wisest path is one that emphasizes the basic science underlying fusion. The increased scientific focus is both exciting and necessary for long term progress in fusion. These realizations are the basis for a fusion program that is genuinely different and, though small compared to the fusion efforts of Europe and Asia, continues to hold vital scientific excitement and technological promise.

However, it must be appreciated that in one year the fusion science community received a traumatic 33% cut, causing the loss of many of our best young scientists, and the shutdown of valuable facilities. Such a draconian and disproportionate cut was wholly unjustified scientifically. We could not absorb another cut without devastating our endeavor. I urge you to now hold the line and commit steadfastly to stable support of this extraordinary scientific endeavor.

In the past year there have been two independent, high-level, outside reviews of the fusion program: the President's Committee of Advisors on Science and Technology (PCAST) and the Department of Energy's Fusion Energy Advisory Committee (FEAC). Both committees lauded the program's remarkable scientific progress, as well as the enormous potential of fusion. Both noted the high importance to the nation of plasma science and recommended a strong basic scientific focus for the program. Recognizing the fiscal reality, both committees described a dynamic program that made sense at funding levels less than that of FY 95. In particular, in the past month FEAC recommended a funding level of $275M. This is $90M less than that of FY 95. I strongly urge you to adopt this recommended funding level. It is time to save the fusion science, a field of major importance to the scientific health of the nation, and to our long term energy security.

Prepared by

S.C. Prager Chair	R.D. Hazeltine Chair-Elect	N. Fisch Vice-Chair

* The view expressed here are on behalf of the Division of Plasma Physics of the American Physical Society, not necessarily of the American Physical Society as a whole.

THURSDAY, FEBRUARY 29, 1996.

NUCLEAR WASTE FUND

WITNESS

HON. KEVIN J. PHILLIPS, MAYOR, CITY OF CALIENTE, NEVADA

Mr. MYERS. The Honorable Kevin Phillips, mayor of the City of Caliente, Nevada.

Is it Caliente?

Mr. PHILLIPS. It is Caliente, whether you speak Spanish or English, Mr. Chairman.

Mr. MYERS. Very good.

Your prepared statement will be in the record and you are recognized for 5 minutes.

Mr. PHILLIPS. My name is Kevin Phillips, and I am the mayor of the City of Caliente, Nevada.

I would like to thank you for inviting me to share the perspective of Caliente and Lincoln County concerning funding of local government oversight activities relating to the Department of Energy's Yucca Mountain site characterization activities and the potential for interim storage in Nevada.

In my part I would like to address three questions which sort of are a synopsis of my written remarks. First of all, why provide oversight funding and the benefits? Why was the funding suspended for fiscal year 1996, and what are the results? And why should local oversight funding be immediately restored for fiscal year 1996 and then provided for in fiscal year 1997 and beyond?

The legacy of the Atomic Energy Commission and prior DOE handling of radioactive hazards has caused people to wonder about the safety of waste management under Federal control, hence the need for local oversight. The drafters of the 1987 amendments to the Nuclear Waste Policy Act recognized the important role that local oversight must play in guiding the Nation's radioactive waste management program.

The capability of local governments to conduct credible repository oversight programs is crucial to the ability of Nevadans to reach informed conclusions about nuclear waste management. I, for example, as a newly elected public servant, became educated about nuclear energy and the management of spent fuel because of oversight funding.

So why fund local oversight? First, to educate and inform the people; second, to establish trust and confidence in the program; and, third, to find the best workable solutions to the problems. These are all desirable outcomes.

Now, question two: Why was funding suspended for fiscal year 1996, and what are the results? Perhaps this occurred because of the strictly oppositional approach assumed by the State of Nevada, which has undoubtedly diminished the credibility of State oversight activities. Perhaps it is due to the reported misuse of these funds by the state. Perhaps this came just because of the budget mess here in Washington.

Whatever the cause, the results are the same: By cutting off funding to the affected counties, you have stopped the only credible scientific oversight studies going on. We have been forced to disband our teams of experts who have worked so diligently to constructively protect the interests of our citizens. Our ability to further develop our objective proposal and prepare for its impact has been substantially limited.

Question three: Why should you restore local government oversight funding? Frankly, because we are part of the solution, not the problem. The broad nature of oversight activities carried out by Lincoln County and the City of Caliente are characteristic of those conducted by the majority of affected units of local government.

We take our oversight responsibilities seriously. Our programs have been the foundation of reasoned thinking about the potential impacts of the repository and related methods for minimizing risks and maximizing system benefits. Our oversight activities have sought to reflect a constructive and balanced approach to develop trust and confidence with Nevada's residents.

Despite enormous political pressure by a few State officials, citizens of Lincoln County have demonstrated their resourcefulness and strong desire to constructively address the difficult issues associated with the handling of nuclear waste and to protect the economic and public health interests of all Nevadans. Our approach has stood in stark contrast to the unproductive and often demagogic approach taken by the State of Nevada, and for this we have been punished by the State in ways you could not imagine.

Why? For offering an option to allow the transport of nuclear waste through our community in an effort to mitigate any potentially adverse impact to the heavily populated areas of Nevada. Our position on this issue has caused us to endure the pain of recall elections orchestrated by State bureaucrats, and, when they failed, they filed costly and personally draining and damaging lawsuits to remove myself and my colleagues from office and then to enjoin me from exercising my constitutional right of free speech. All of these failed. All this came because we sought a dialogue with Congress.

I respectfully request that you do two things: First, restore oversight funding for the balance of fiscal year 1996; and, second, provide oversight funding for 1997 and beyond. I have offered specific language in my written testimony that I hope you will consider.

Let me conclude by saying that by focusing on Nevada as the solution to this Nation's radioactive waste program, Congress is imposing a significant burden upon local governments who are responsible for the protection of their citizens. We want to work with you and along with you, not against you nor really for you.

Thank you, Mr. Chairman.

Mr. MYERS. Thank you for your very fine testimony. We are very much aware of the very real problem that you have, and we will be pleased to work with you.

[The statement of Mr. Phillips follows:]

TESTIMONY OF KEVIN J. PHILLIPS, MAYOR
CITY OF CALIENTE, NEVADA
BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
February 29, 1996

Mr. Chairman, my name is Kevin J. Phillips. I am Mayor of the City of Caliente, Nevada. I would like to thank you for inviting me to share the perspective of Caliente and Lincoln County concerning funding of local government oversight activities relating to the Department of Energy's Yucca Mountain Site Characterization activities and the potential for interim storage in Nevada.

Lincoln County is one of ten units of local government which have been designated as "affected" pursuant to the Nuclear Waste Policy Act, as amended. What was identified in the 1986 Yucca Mountain environmental assessment remains true today: Lincoln County will almost certainly serve as the gateway for the vast majority of shipments of high-level radioactive waste entering Nevada which are destined for storage and disposal at the Nevada Test Site.

Despite enormous political pressure by a few state officials, the citizens of Lincoln County have demonstrated their resourcefulness and strong desire to constructively address the difficult issues associated with the handling of nuclear waste and to protect the economic and public health interests of all Nevadans. Our approach, and in fact, the approach of most other affected local governments has stood in stark contrast to the unproductive, and often demagogic approach taken by the State of Nevada. We have been punished by the State of Nevada in ways you could not imagine.

Why? For offering an option to allow the transport of nuclear waste through our community in an effort to mitigate any potentially adverse impact to the heavily populated areas of Nevada.

Our position on this issue has caused us to endure the pain of such things as recall elections orchestrated by state bureaucrats. When that failed they filed costly and personally draining and damaging law suits to remove myself and my colleagues from office.

That failed as well.

The state has played every imaginable bureaucratic game to punish us for our actions.

We are big boys and girls in Lincoln County -- we stood strong, we anticipated their actions, we outmaneuvered the bureaucrats at every turn -- and we won. But then Congress pulled the rug out from under our feet by eliminating vital oversight funding.

We believed we offered a solution to some of the most troubling problems associated with this program, and while we understand Congress' desire to restructure the nuclear waste program and hold costs down during the restructuring, we remain at a loss to understand why you suspended funding for local government oversight which, by all accounts, is the most constructive oversight element in the nuclear waste program. In doing so you have substantially limited our ability to further develop our proposal and prepare for its impacts. We have been forced to disband our team of experts who have worked so diligently to constructively protect the interests of our citizens.

For the past ten years, Lincoln County and the City of Caliente have conducted a joint repository oversight and impact alleviation planning program. During this period, the Joint City/County Impact Alleviation Committee has diligently sought to provide guidance to local repository programs. The committee, representing both geographic and disciplinary diversity, has met no less than 60 times and has invested over 1,000 hours of largely volunteer time to understand the implications of the nation's nuclear waste management program to Lincoln County. Utilizing funding provided by the DOE, the committee has overseen the preparation of over 45 reports documenting repository system implications for Lincoln County. Topics addressed within these studies include emergency

response, transportation routing, economic/demographic impact assessment, community development, transportation risk assessment, risk communication, tourism impact assessment, fiscal impact assessment, and risk perception, among others. The numerous studies sponsored by the county and city have utilized teams of highly trained and competent researchers representing both academic and private entities. The results of these studies have been widely communicated to residents throughout Lincoln County and in other areas of Nevada. Lincoln County and the City of Caliente utilized this extensive information base in preparing comprehensive written comments to the scope of the repository EIS.

The broad nature of oversight activities carried out by Lincoln County and the City of Caliente are characteristic of those conducted by the majority of affected units of local government. We take our oversight responsibility seriously. Our programs have been the foundation for reasoned thinking about the potential impacts of the repository system and related methods for minimizing project risks and maximizing system benefits. Our oversight activities have sought to reflect a constructive and balanced approach and to develop trust and confidence with Nevada's residents.

The capability of local governments to conduct credible repository oversight programs is crucial to the ability of Nevadans to reach informed conclusions about nuclear waste management. The legacy of the Atomic Energy Commission and early Department of Energy handling of radioactive hazards has caused people to wonder about the safety of waste management under federal control. Hence, the need for local oversight. The drafters of the 1987 Amendments to the Nuclear Waste Policy Act recognized the important role that local oversight must play in guiding this nation's radioactive waste management program. However, effective local oversight of this program cannot occur without federal funding.

Perhaps Congress' decision to "suspend" funding oversight programs is due to the reported misuse of these funds by the State of Nevada. The abuses by the State have been documented by the GAO and the States' own auditors. I'm here to tell you that the abuse likely runs much deeper than the auditors have discovered.

Unfortunately, it is Lincoln County and the other affected local governments that are being punished. The State of Nevada program can continue to operate through 1998 using so-called "fenced" funds from the FY 1991 appropriation which were recently released by the DOE because the State had "demonstrated cooperation."

We, in the affected counties, feel like children in a classroom being punished due to the actions of one misbehaving child whom we have no control over. However, this situation is even worse because the bad boy is getting away with it and the rest of the class has been punished.

With all due respect, please don't punish us because of the abuse of funds by the State of Nevada.

Since October of 1995, DOE has accelerated tunnel boring activities and construction of the exploratory studies facility, as a result, the repository has proceeded at a record pace during the current fiscal year. As of February 16, the tunnel boring machine was 4,954 feet or 132 days ahead of schedule. Since October of 1995, DOE has completed work on the second phase of a major study of alternative rail and highway routes through Nevada to the Nevada Test Site. Transportation planning activities are continuing in earnest. On March 1, contractors will deliver the Mined Geologic Disposal System Advanced Conceptional Design to DOE. Also, during March, DOE plans to issue a Federal Register notice of proposed policy and procedures for implementation of the section of the Nuclear Waste Policy Act dealing with training of local emergency response personnel. All of these activities are proceeding during FY 96 at the same time that funding for local government oversight has been suspended. I would respectfully ask the Subcommittee to rescind its decision to restrict the provision of oversight funding to local units of government during FY 96.

Given that the Department of Energy has adjusted to its reduced levels of funding by becoming more efficient in conducting site characterization activities, and given that the department is committed to reaching a conclusion regarding the suitability of Yucca Mountain by 1998, there remains an obvious need for local government oversight. Despite the reduced funding which has been and may be provided to DOE, site characterization and waste management planning activities in Nevada are proceeding forward aggressively. It is, we believe, at the very least, imperative that oversight funding be provided within the FY 97 budget. I respectfully urge that you consider the following language for inclusion in the 1997 Energy and Water Development Appropriations Bill.

> ***"Provided, that of the amount herein appropriated, not more than $7,000,000 may be provided to affected units of local government, as defined in the Nuclear Waste Policy Amendments Act, to conduct appropriate activities pursuant to the Act. Provided further, that the distribution of the funds herein provided among the affected units of local government shall be determined by the units of local government and shall be by direct payment. Provided further, that within ninety days of the completion of each Federal fiscal year, each local entity shall provide certification to the Department of Energy, that all funds expended from such payments have been expended for activities as defined in Public Law 97-425, as amended. Failure to provide such certification shall cause such entity to be prohibited from any further funding provided for similar activities. Provided further, that none of the funds herein appropriated may be used directly or indirectly to propose or influence the outcome of pending federal legislation. Provided further, that none of the funds herein appropriated may be used for litigation whose result would be to limit or restrict implementation of federal authorizing legislation regarding management and disposal of nuclear waste. Provided further, that none of the funds provided herein shall be used to support***

multi state efforts or coalition building activities inconsistent with the restriction contained within this Act."

The proposal that we have made and that we hope you will consider, could well lead this program into the path of progress. Lincoln County has offered an option which will avoid the adverse political, economic and safety consequences associated with shipping high level nuclear waste through heavily populated and rapidly growing jurisdictions in Nevada. Perhaps more important, we have, through our aggressive actions, helped to destroy the "smoke and mirrors" myth fabricated by a few State officials which holds that the vast majority of Nevadans are stalwart opponents of this project. You may hear some Nevada officials try to characterize us as just one small rural county -- just a bunch of country bumpkins. Yes we are rural Nevadans, but our views represent the sentiments of many, many Nevada citizens and leaders who have been intimidated for far too long -- who have been prevented from expressing their true views and beliefs.

In simple terms, Lincoln County has offered a solution that would do nothing less than mitigate all adverse impact to the rest of the State of Nevada.

We want to help solve this problem.

In conclusion, let me observe that by focusing upon Nevada as the solution to this nation's radioactive waste management problem, Congress is imposing a significant burden upon local governments who are responsible for the protection and enhancement of the health, safety, and welfare of their residents. We are, and have been, responsible and constructive participants. We want to help solve this problem and we want to protect the interests of all Nevadans while doing so.

Again, thank you Mr. Chairman for inviting me to appear before you and this Committee.

THURSDAY, FEBRUARY 29, 1996.

NEW MEXICO PROJECTS

WITNESS

HON. BILL RICHARDSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW MEXICO

Mr. MYERS. Our colleague from New Mexico, the Honorable Bill Richardson.

Bill, your prepared statement will be placed in the record, and you may proceed for the next 5 minutes as you would like.

Mr. RICHARDSON. Mr. Chairman, thank you. Once again, my thanks to this subcommittee for the enormous generosity that you bestow on the State of New Mexico, particularly our energy programs.

Mr. Chairman, I have two requests, one for my usual irrigation ditches in New Mexico, which Mr. Bevill is more of an expert than any; and, secondly, Mr. Chairman, the Los Alamos National Laboratory, as you know, is in my State.

I ask for continued support for the stockpile stewardship and management program that is being initiated at the labs; the tritium supply program which includes also research on accelerator production of tritium; the supercomputing initiative program, which you in the past have helped fund and spur; funding for verification and control technology for nonproliferation research and intelligence programs; the memorandum of understanding between the Department of Energy and other agencies to help deal with the nuclear biological and chemical threat; funding for the Office of Health and Environmental Research at DOE, which supports the Human Genome Project and structural biology research; environmental technology programs; environmental management account for stewardship of pollution prevention; the environmental restoration account to ensure zero waste operations to avoid future waste liabilities at the lab.

Mr. Chairman, you have been a very strong supporter, and this subcommittee on a bipartisan basis, to all of our national laboratories. I am here on behalf of Los Alamos and Sandia. I know Mr. Schiff will probably explain that further.

With that, Mr. Chairman, I thank you for your attention.

Mr. MYERS. Well, thank you, Bill. We will work very closely again, as we always have worked with you, and we appreciate your contribution. Thank you.

[The statement of Mr. Richardson follows:]

CONGRESSMAN BILL RICHARDSON
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
HOUSE COMMITTEE ON APPROPRIATIONS

FEBRUARY 29, 1996

Thank you Mr. Chairman and members of the Subcommittee for the opportunity to testify today on several projects of the utmost importance to my Congressional district in New Mexico.

U.S. Army Corps of Engineers Acequias Program

Under the Water Resources Development Act of 1986, the U.S. Army Corps of Engineers was directed to take measures to protect, repair, and restore the historic acequia irrigation systems in New Mexico. As you know from my testimony in previous years, Mr. Chairman, acequias are a system of irrigation ditches, canals, and small diversion dams dating back to the 18th Century. They are the single most important source of irrigation for small, rural communities in New Mexico which depend heavily on acequias for their economic livelihood.

As you will undoubtedly recall, I have come before this Subcommittee for many years to request continued funding of this vitally important water program. Unfortunately, although many acequias have applied for assistance from the U.S. Army Corps of Engineers, a backlog continues to exist. Despite repeated appropriations, this pattern has continued for a number of years, and additional acequias are now in dire need for repairs and reconstruction.

I respectfully request $3 million for the acequias program for FY 1997, in order to meet the continued needs of local communities in New Mexico. As in the past, I request that report language be included to direct the Corps to accelerate the number of acequia projects that it undertakes.

In addition, I request that language be included in the bill to allow additional agencies, such as the Bureau of Reclamation to undertake acequia related work through a cooperative arrangement. I would also like to see language that increases flexibility by allowing acequia district members to perform some of their own repairs.

Los Alamos National Laboratory

I respectfully ask the Subcommittee to consider the following requests:

Over the past few years, the global context regarding nuclear deterrence and the national security has changed significantly. In the absence of nuclear testing, the Department of Energy (DOE) and its defense laboratories, including the Los Alamos National Laboratory (LANL), are responsible for implementing a stewardship and management plan to maintain a high level of confidence in safety, reliability, and performance of the U.S. nuclear stockpile. In this regard, LANL retains a unique stockpile stewardship role. In fact, it is the only location in the Unites States where facilities exist in a central way to handle and process plutonium. Furthermore, enhanced radiographic facilities such as the laboratory's DAHRT facility help provide DOE with precise data about the safety, reliability, and performance of weapons in the stockpile.

I respectfully request a $297 million increase in the FY97 stockpile stewardship and management program beyond the budget request for Los Alamos and other defense laboratories.

Neutron scattering is an important tool in examining the structure of materials and is complementary to x-ray and other technologies. The Los Alamos Neutron Science Center (LANSCE) is the focal activity of neutron research at LANL where scientists have been concentrating on techniques in scientific areas to which neutron scattering has not been applied in the past. The LANSCE facility has a number of unique capabilities, among them being neutron radiography which, with microscopic precision, provides an important and non-destructive evaluation technique for nuclear capabilities. This is especially relevant to Los Alamos support for the science-based stockpile stewardship program.

I respectfully request that the Subcommittee sustain the budget request for the LANSCE operations, as well as provide an additional $54 million beyond the budget submission for the national tritium supply program which includes research on accelerator production of tritium.

Los Alamos has always been on the cutting edge in high performance computing modeling and simulation and has diffused these capabilities into the national and scientific technical and industrial communities. More specifically, the laboratory is emphasizing modeling and scientific computation inherent to the laboratory's mission to support weapons certification and analysis.

I respectfully request the Subcommittee provide an increase of $40 million beyond the budget request for the ASCI program while ensuring that the additional funding for this program should not be taken from the core research and development.

In order to reduce the threat of the proliferation of nuclear materials, Los Alamos is continuing to develop a variety of international programs to control, manage, and dispose of nuclear weapons and materials in a secure manner. The laboratory has participated in joint efforts at Russian nuclear facilities to extend material protection, control, and accountability programs. They are also developing technologies like satellite sensors needed to detect weapons proliferation and to monitor various arms control agreements.

I respectfully request an increase of $120 million beyond the submission for the verification and control technology account for nonproliferation research as well as intelligence programs.

Concern about the proliferation of nuclear, biological, and chemical (NBC) weapons and terrorism is decades old. However, recent developments, from reports of nuclear smuggling out of the former Soviet Union to the terrorist use of nerve gas in a Tokyo subway, have heightened the NBC threat to national security. With competencies in NBC research, Los Alamos can help reduce the threat of terrorist activities and the proliferation of those weapons.

I respectfully request $100 million to support a planned memorandum of understanding between the DOE and other agencies to help address the NBC threat. In particular, this funding should be provided for in the verification and control technology account.

The bioscience and biotechnology programs at Los Alamos are playing an increasingly important role in diverse applications including medicine, environmental clean-up, and non and counter proliferation. Research in the Human Genome Project, which was designed to analyze and map certain genes for disease prevention and health effects has resulted in numerous scientific advances.

I respectfully request the Subcommittee to sustain funding for the DOE Office of Health and Environmental Research including money for the Human Genome Project and structural biology research.

Finally, the Los Alamos National Laboratory is attempting to achieve a recognized environmental science program based on the laboratory's contribution of science to major need in the environment. Therefore it will be better positioned as a major participant in the formation of emerging national environmental science programs.

I respectfully request a $60 million increase beyond the budget request for the environmental technology initiative which emphasizes the application of scientific research and development for a more cost effective clean-up of DOE sites. I also request an additional $13 million for the Environmental Management account for environmental stewardship including pollution prevention. Finally, I request $11 million for Los Alamos to ensure near zero waste operations to avoid future waste liabilities at the laboratory.

Sandia National Laboratory

I respectfully request the Subcommittee to consider appropriate funding for the following requests to ensure that Sandia can successfully continue its important mission in research and development and to ensure national security.

Without nuclear testing and with significantly reduced weapon research and development and production budgets, an effective science based stockpile stewardship approach is essential. The eroding stewardship budget erodes Sandia's ability to meet the Department of Defense requirements to certify nuclear weapon safety and reliability.

The Sandia Laboratory provides a key researching role for solar and renewable energy supply. Congressional support is needed to assure future environmentally safe supplies for the United States while also putting U.S. industries in a position to sell those capabilities and equipment to the increasing world market.

Continued support and funding for the construction of the Sandia Combustion Research Facility (CRF) is critical to increasing the efficiency and ability of combustion processes. In addition, the CRF program has successfully involved industry, universities, and the research community.

THURSDAY, FEBRUARY 29, 1996.

LAKE COUNTY GEYSERS EFFLUENT PIPELINE AND INJECTION PROJECT

WITNESS

HELEN WHITNEY, CHAIR, LAKE COUNTY, CALIFORNIA, BOARD OF SUPERVISORS

Mr. MYERS. I now recognize Mr. Riggs of California to make the next introduction.

Mr. RIGGS. Thank you, Mr. Chairman. I am just delighted to welcome to the subcommittee for her testimony a very good friend and colleague, Supervisor Helen Whitney from Lake County, and Mark Dellinger who is the—I want to make sure I say Mark's correct title. He is the Lake County Energy and Resource Manager. Did I get it right?

I really regard Helen as not only a personal friend but a trusted adviser. She has been one of the people who have spearheaded our geyser's pipeline project using treated wastewater or effluent, as we heard earlier today, to inject the geysers and extend the energy life of the geyser's field. It is a win/win for all concerned, and it is a project we want to see through to completion.

Supervisor Whitney.

Ms. WHITNEY. Thank you very much, Mr. Myers and members. I have a prepared statement I would like to read to you, and I believe that you have a very similar copy given out to you.

As Mr. Riggs says, I am Helen Whitney. I am Chair of the Lake County Board of Supervisors, and I am also Supervisor for District 1. About 85 percent of the pipeline project is in my district.

I appreciate this opportunity to appear before you today on behalf of Lake County and the Southeast Geysers effluent pipeline project. I would like to use this opportunity to update you on the project's status and to explain our need for a final Department of Energy cost share in fiscal year 1997 to bring project construction to completion.

First, we want to acknowledge the support of your subcommittee over the past three fiscal years when Department of Energy funds enabled us to create one of the Nation's strongest public/private partnerships for economic and environmental action and to create the world's first system for converting municipal wastewater into geothermal electricity. The funds provided by the Department of Energy and other stakeholders have allowed us to complete all engineering, environmental and permitting procedures, culminating in the construction ground breaking that was held last October.

As was remarked upon by the Department of Energy's representative at the ground breaking, our project now represents a major step in turning the rhetoric of sustainability into real infrastructure that delivers tangible long-term economic and environmental benefits. We are not only cleaning up our wastewater, we are using it to produce the energy needed to drive a growing economy, and we are doing it primarily with industry and local funds supplemented by Federal and State support. We are particularly proud of the 25-year operating agreement recently signed by project participants, which underscores the long-term commitment we have to this partnership.

As we enter our construction face, we are before you today to respectfully request that the subcommittee include in the Department of Energy's geothermal account $2 million to complete the effluent pipeline project. This $2 million, which equates to only a 5 percent increase in the project's $43 million total cost, is needed for construction complexities found over the 29 miles of pipeline route. As with all long pipelines, our preliminary studies were unable to expose all of the conditions we now face. With our recent completion of final engineering, we can now precisely know where the pipeline must go to avoid geologic hazards and what type of pump motors would be most efficient and some other similar details. We finished all of the final geo-technical studies that were not available at the preliminary stage.

This additional 5 percent DOE cost share will still result in over 50 percent of the project budget coming from industry, and Lake County citizens will still be shouldering a sewer rate increase of 100 percent for their share of the costs. In other words, we know we are all in this together, and we are not abandoning the partnership principles that are at the foundation of this project.

Most importantly, we also share in the project's benefits. Our communities will prosper with improved infrastructure. Our geothermal industries will retain its productivity. And according to the Bureau of Land Management, the Federal Government will more than recoup its investment because the project will replenish a declining geothermal reservoir and therefore substantially increasing geothermal royalties to the Federal Treasury.

What this means is that the Treasury actually nets more than $3 for each Federal dollar invested in this project. So, in fact, the Federal Government is a working partner with us, realizing a return on its investment and recouping its investment in less than 10 years.

We hope that you agree this is the kind of investment the Nation should be making for the future, where government, industry and citizens take joint responsibility for and work in partnership for innovatively achieving both economic progress and environmental protection.

While I am here, on behalf of Lake County, and since I have about 1 minute left, I would also like to request the subcommittee's support for two other projects that fall within the jurisdiction of the Corps of Engineers. First, I would like to thank the subcommittee and Congressman Riggs, of course, in particular, for providing $300,000 in fiscal year 1996 for the Northern California Stream's Middle Creek Flood Control Project in Lake County. The Corps of Engineers had estimated about $600,000 for the reconnaissance study phase; and, therefore, we would respectfully request that the balance of that, the second $300,000, be put in the 1997 Energy and Water Bill.

Then my second request is that we, again very respectfully, request your consideration of $250,000 to update a feasibility study for Dry Creek Dam. Due to the settlement conditions of a full stream adjudication, which we are taking to the judge tomorrow, the project will probably be our last chance to develop a dependable water supply and some flood protection for the middle town area of Lake County. So I would like for your consideration on that, too.

Thank you very much.

Mr. MYERS. Well, thank you very much, Ms. Whitney. Sorry for the slight interruption there, but we have a busy schedule around here.

Ms. WHITNEY. I have seen that with everyone I think today. Thank you very much for your time.

[The statement of Ms. Whitney follows:]

COUNTY OF LAKE
BOARD OF SUPERVISORS
Courthouse
Lakeport, California 95453
Telephone 707/263-2368
Fax 707/263-2207

February 29, 1996

Honorable John T. Myers, Chairman
House Appropriations Subcommittee on
Energy & Water Development
2362 Rayburn House Office Bldg.
Washington, D.C. 20515

Dear Chairman Myers:

We appreciate this opportunity to appear before you today on behalf of Lake County, California and the Southeast Geysers effluent pipeline project. We would like to use this opportunity to update you on the project's status, and to explain our need for a final Department of Energy cost share in FY 97 to bring project construction to completion.

First, we want to acknowledge the support of your Subcommittee over the past three fiscal years when Department of Energy funds enabled us to create one of the nation's strongest public/private partnerships for economic and environmental action; and to create the world's first system for converting municipal wastewater into geothermal electricity. The funds provided by the Department of Energy and other stakeholders have allowed us to complete all engineering, environmental, and permitting procedures, culminating in the construction ground breaking that was held last October 6.

As was remarked upon by the Department of Energy's representative at the ground breaking, our project now represents a major step in turning the rhetoric of sustainability into real infrastructure that delivers tangible long-term economic and environmental benefits. We are not only cleaning up our wastewater, we are using it to produce the energy needed to drive a growing economy. And we are doing it primarily with industry and local funds supplemented by federal and state support. We are particularly proud of the 25-year operating agreement recently signed by project participants, which underscores the long-term commitment we have to this partnership.

As we enter our construction phase, we are before you today to respectfully request that the Subcommittee include in the Department of Energy's geothermal account $2 million to help complete the effluent pipeline project. This $2 million, which equates to a 5 percent increase in the project's $43 million total cost, is needed for construction complexities found over the 29 miles of pipeline route. As with all long pipelines, our preliminary studies were unable to expose all of the conditions we now face. With our recent completion of final engineering, we now know precisely where the pipeline must go to avoid geologic hazards, what type of pump motors will be most efficient, and other similar details affecting final costs.

This additional 5 percent DOE cost share will still result in over half of the project budget coming from industry, and Lake County citizens will still be shouldering a sewer rate increase of 100 percent for their share of the costs. In other words, we know we are all in this together, and we are not abandoning the partnership principles that are at the foundation of this project.

Most importantly, we also share in the project's benefits. Our communities will prosper with improved infrastructure. Our industries will retain their productivity. And according to the Bureau of Land Management, the Federal government will more than recoup its investment because the project will replenish a declining geothermal reservoir and thereby substantially increase geothermal royalties to the Federal Treasury. In fact, the Treasury will net several dollars for each federal dollar invested in the project.

We hope that you agree this is the kind of investment the nation should be making for the future, where government, industry, and citizens take joint responsibility for innovatively achieving both economic progress and environmental protection. Thank you again for your consideration.

Sincerely,

Helen Whitney

Helen Whitney
District 1 Supervisor

HW:kc

S.E. GEYSERS EFFLUENT PIPELINE PROJECT

A Public/Private Partnership for:

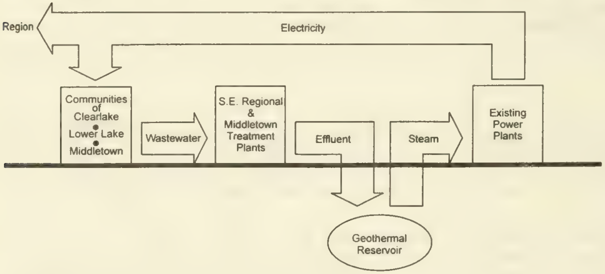
- **Environment:** superior wastewater disposal.
- **Energy:** sustaining clean power generation.
- **Economy:** retention and creation of jobs.

Participants:

- Lake County Sanitation District
- Calpine Corporation
- Northern Calif. Power Agency
- Unocal Corporation
- Pacific Gas & Electric Co.
- U.S. Department of Energy

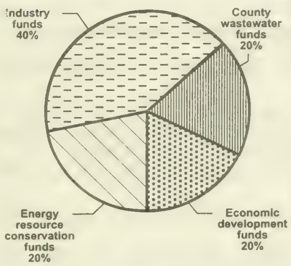
Project Description

A 29-mile, 20-inch diameter buried pipeline will carry 7.8 million gallons per day of treated wastewater effluent and lake make-up water from Lake County Sanitation District treatment plants at Clearlake and Middletown to three Geysers steam suppliers: Unocal Corporation, Calpine Corporation and the Northern California Power Agency (NCPA). These steam suppliers will construct and operate secondary pipelines to distribute the effluent to geothermal injection wells. Power plants operated by NCPA and Pacific Gas & Electric Company will receive steam supplies created by the effluent injection. Depending upon steam recovery rates from the injected effluent, the project will result in a gain of approximately 70 MW in power output. This will equate to as much as 625,000 MWh of clean, low-cost electricity generation annually for over one million Northern California consumers. In addition to these energy benefits, the project will also provide a long-term environmentally-superior method of wastewater disposal for Clearlake, Lower Lake, and Middletown; and help create and retain jobs in these communities that depend on effective wastewater systems.


Region
Electricity
Communities of Clearlake • Lower Lake • Middletown
Wastewater
S.E. Regional & Middletown Treatment Plants
Effluent
Steam
Existing Power Plants
Geothermal Reservoir

2/23/96

CONSTRUCTION COST-SHARING PLAN



Costs & Financing

onstruction of the effluent pipeline and associated Middletown and S.E. Regional Wastewater Treatment Plant improvements are estimated at approximately $45 million. The public/private financing plan uses County wastewater funds, federal and state financial assistance, and Geysers operators' funding for construction. The Geysers operators will also spend an additional $7 million on secondary distribution and injection facilities within the Geysers steamfield.

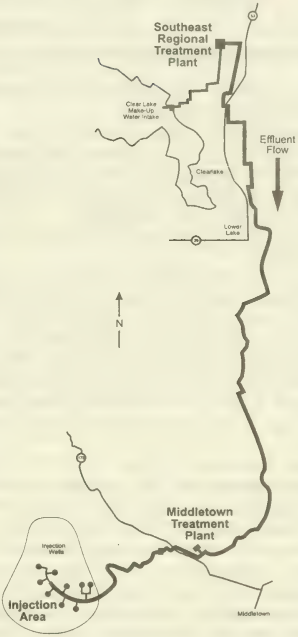
Schedule

Construction commenced on October 6, 1995, with the project scheduled to become operational in 1997.

Ownership & Operation

The main effluent pipeline will be owned and operated by the Lake County Sanitation District up to a point of delivery near Hwy 175. Unocal, Calpine and NCPA will own and operate the final stretch of pipeline, and the lift pump stations up to The Geysers. NCPA will use the effluent-based steam in its own power plants, and PG&E will purchase effluent-based steam from Unocal and Calpine for its power plants.

EFFLUENT PIPELINE ROUTE


53
Southeast Regional Treatment Plant
Clear Lake Make-Up Water Intake
Effluent Flow
Clearlake
Lower Lake
29
N
175
Middletown Treatment Plant
Injection Wells
Injection Area
Middletown

ADDITIONAL INFORMATION

Mark Dellinger, Lake County Sanitation District, Lakeport, California, phone 707/263-2273.

THURSDAY, FEBRUARY 29, 1996.

GRIDLEY RICE STRAW BIOFUELS PROJECT

WITNESS

TOM SANFORD, DEPUTY MAYOR, CITY OF GRIDLEY, CALIFORNIA

Mr. MYERS. The Chair will recognize Mr. Fazio of California for the next witness.

Mr. FAZIO. First of all, I want to say hello to my friends from Lake County and indicate continuing support for Mr. Riggs' efforts in helping here, because it is a regional issue in many ways.

Ms. WHITNEY. It is, and I would like to thank you for your understanding and your support.

Mr. FAZIO. You are very kind. We will work together, and we will all benefit.

I have constituents here from Gridley, California, as well, Mr. Chairman; and I thought that perhaps since they are more patient than anyone, having missed their chance to get up earlier, that this might be a good time for them to come.

I would like to particularly indicate that Tom Sanford, as the Deputy Mayor of Gridley, is a person who I have come to greatly admire because of the way he has championed the cause that he is going to be explaining to the committee. Tom, thank you personally.

Mr. SANFORD. Thank you, Mr. Fazio, Chairman Myers, members of the committee. My name is Tom Sanford, as Congressman Fazio as stated, and I am the Mayor Pro Tem of the City of Gridley in the Sacramento Valley of California.

Thank you for the opportunity to again testify and appear before you. I appreciate that opportunity. We want to report on our progress over the last year and the planning and developing of a biomass facility utilizing waste rice straw.

Let me say from the outset that we greatly appreciate the subcommittee's past support, particularly the support of our own Congressman, Congressman Vic Fazio, and certainly the assistance of Congressman Frank Riggs, who is our neighbor to the west. Both Members have been very supportive of our efforts to establish a cost-effective, subsidy-independent, renewable source of liquid fuel for transportation.

The City of Gridley, which operates its own electrical utility, is pursuing this project for a number of reasons. The City is situated in a rice-growing area in the Sacramento Valley. The State of California is, on a statutory basis, eliminating the open field burning of rice straw; and this threatens the industry's viability and, hence, our local economy. The facility we are planning will be large enough to utilize 20 percent of California's rice straw and will help the industry to eliminate environmental concerns relative to the open field burning of that straw.

Second, the City is very concerned about the long-term availability of its existing stores of electrical power from the Western Area Power Administration. The Gridley project will generate significant amounts of electricity as well. It is the confluence of these two issues, the mandatory elimination of the burning of rice straw in open fields and the uncertainty associated with our WAPA power that has lead the City of Gridley to aggressively pursue the construction of this facility.

Over the last year, the City of Gridley has put together a consortium that we believe can match the capabilities of any similar concern in the United States. We have proven engineering capabilities through Amoco and Stone and Webster and the backing of two major utilities and another California power agency in the Sacramento municipality district, the University of California at Davis as well as many people in the rice industry. In addition, Mr. Chairman, our consortium has worked in partnership with the Department of Energy's National Renewable Energy Laboratory.

Since I appeared before you last year, research performed at the pilot plant that you funded at NREL in Golden, Colorado, has verified the dramatic efficiency of this improved technology which we hope we will be the first in the world to commercialize.

Mr. Chairman, in order to continue the progress we have made towards construction of a biomass ethanol plant, the City of Gridley and its non-Federal cost-share partners requested $3 million in fiscal year 1997. The request represents what is intended to be the second of three equal commitments of Federal resources that will be needed in order for the City and its partners to construct the optimum-sized biomass ethanol plant.

We seek these funds in addition to the amounts requested by the administration for the transportation sector of the biofuels budget. We believe that research and experimental activities supported by the Department of Energy, particularly the work associated with the new biomass power facility at NREL, will be critical to the success of the Gridley project and future biomass efforts. We believe that the commercialization of this technology will ultimately make the biomass conversion of agricultural waste to ethanol competitive in a subsidy free environment. The construction of the Gridley plant will also develop and commercialize technologies and processes necessary for the cost-effective use of forest and timber industry by-products.

Mr. Chairman, I would like to make one final point. The City of Gridley and its partners are prepared to match dollar for dollar any funds appropriated for the construction of our proposed biomass ethanol plant. We have the resources available to match the full $3 million request for fiscal year 1997.

In summary, we believe that the strengths of our projects are as follows:

One, the commercialization of this technology will allow for the economic conversion of agriculture and forestry waste into full and electrical energy and in the process create job growth and eliminate environmental concerns;

Two, our initial commercialization of this technology will prove to the financial community the economic viability of the subject processes;

Three, the commercialization of this technology will energize the Midwest ethanol industry by freeing it from subsidy dependence; and

Four, provide the United States with a new exportable technology.

Again, I thank you and your committee for your support in the past; and I want to thank you for your service to this country and offer you congratulations on your retirement.

Mr. MYERS. Thank you.

[The statement of Mr. Sanford follows:]

Statement of the Honorable Tom Sanford
Deputy Mayor
City of Gridley, California
Before the Senate Appropriations Subcommittee
on Energy and Water Development
The Honorable John Myers, Chairman
February 29, 1996

Mr. Chairman, Members of the Subcommittee, my name is Tom Sanford, and I am the Mayor Pro Tem of the City of Gridley, California. I also serve as Gridley's commissioner on the governing board of the Northern California Power Agency, a joint powers agency amongst 15 public power providers.

Thank you for the opportunity to testify before the Subcommittee regarding the progress that the City of Gridley has made over the last year in dplanning and developing a biomass facility utilizing waste rice straw.

Let me say from the outset that we greatly appreciate the Subcommittee's past support, particularly the support of the City of Gridley's own congressman, Congressman Vic Fazio, and Congressman Frank Riggs, our neighbor to the west. Both Members have been very supportive of our efforts to establish a cost-effective, subsidy-independent, renewable source of liquid fuel for transportation. I'd also like to publicly thank Congressman Wally Herger, who represents the City of Biggs, just three miles north of Gridley, who has also been a strong backer of our project.

The City of Gridley, which operates its own electrical utility, is involved in the development of this technology for a number of reasons. First, the City of Gridley is a rural community situated in the rice growing region of the Sacramento Valley in Northern California. Our community and region are dependent upon an agricultural economy largely based upon rice production. Thousands of jobs and more than $500 million of the Sacramento Valley's economy are directly dependent upon the rice industry.

The rice industry, however, is coming under tremendous pressure because of new mandates to reduce air pollution and end open field burning of rice acreage. Currently, open field burning has been statutorily reduced to 50 percent of a grower's acreage. By the year 2000, the automatic right to burn rice stubble in open fields will be essentially eliminated. Given that there are insufficient cost-effective mechanisms to remove rice straw from the fields, we are greatly concerned that the restrictions on burning will lead to a reduction in rice acreage in production. A substantial portion of the rice grown in the Sacramento Valley is grown on land with very heavy clay soil types which are suitable for very little other than rice. The elimination of burning as a means of dealing with the very tough rice straw is having a significant impact upon the economics of rice growing in the Valley.

The facility we are planning will be large enough to consume rice straw from 80,000 acres of rice fields. This one plant will provide a safe and clean method of disposing of nearly 20 percent of California's rice straw. This is a very serious problem for the rice industry and we believe that our proposed facility is the major option for disposal currently being pursued.

Second, the City of Gridley is very concerned about the reliability of its existing source of electrical power. The City of Gridley's Western Area Power Administration (WAPA) electrical contract expires in 2004. In addition, the various proposals to sell-off the WAPA facilities have created even further uncertainty as to the ongoing sources of electrical energy from which the City will serve the electrical needs of its citizens on an affordable basis.

And, the Gridley project will not only produce ethanol, it will generate significant amounts of electricity as well. The plant is expected to produce some 20 million gallons of ethanol a year and generate 12.5 megawatts of electricity. Of the 12.5 megawatts of electricity that the plant will produce, 4.5 megawatts will be surplus to electricity needs of the plant. That's about half the amount of electricity the City of Gridley receives from WAPA each year, and it will go a long way toward securing a stable, affordable source of electricity for our community.

It is the confluence of these two issues -- the mandatory elimination of the burning of rice straw in open fields and the uncertainty associated with our WAPA power -- that has led the City of Gridley to aggressively pursue the construction of a biomass ethanol plant to help protect our agricultural economy, eliminate environmental concerns relative to the open field burning of rice strw and address our near-term and long-term power needs.

Over the last year, the City of Gridley has put together a consortium that we believe can match the capabilities of any similar concern in the United States. We have brought together some of the top companies in the country that have focused on the development of a domestic liquid fuel biomass industry. We have proven engineering capabilities through Amoco and Stone and Webster, and the backing of two major utilities (Northern California Power Agency and the Sacramento Municipal Utility District), the California Department of Food and Agriculture, the University of California at Davis and the California Rice Industry Association. In addition, Mr. Chairman, our consortium has worked in partnership with the Department of Energy's National Renewable Energy Laboratory. We have also cleared some key tests of rice straw as a biomass fuel and begun the final technical assessment of the key technologies that make up our proposed process. Since I appeared before you last year research performed at the pilot plant you funded at the National Renewable Energy Laboratory in Golden, Colorado, has verified the dramatic efficiency of this improved technology, which we hope to be the first in the world to commercialize.

None of this progress could have been made without the support and backing of this Subcommittee in the fiscal years 1995 and 1996. The $4,200,000 appropriated by the Congress over the previous two fiscal years for this effort has been essential to bringing together all of the resources that we have amassed to pursue the construction of a biomass ethanol plant for the benefit of our region, the state and the nation. It is important that the technology developed by NREL and Amoco be applied on a commercial basis to assure the financial community that the technology will compete independent of Government subsidies. Again, for that we are very grateful.

Mr. Chairman, in order to continue the progress we have made toward the construction of a biomass ethanol plant, the City of Gridley and its non-Federal cost-share partners request $3,000,000 in fiscal year 1997. The request represents what is intended to be the second of three equal commitments of federal resources that will be needed in order for the City of Gridley and its partners to construct the optimum sized biomass ethanol plant.

We seek these funds in addition to the amounts requested by the administration for biomass energy systems, transportation sector. We believe the research and experimental activities supported by the Department of Energy, particularly the work associated with the new biomass pilot facility at NREL, will be critical to the success of the Gridley project and future biomass efforts. It is for these reasons that we ask the Subcommittee to direct that any funds provided for the Gridley biomass plant not result in reductions to the base transportation sector, research and development budget.

Why is there a need for the federal government to make this investment? Currently, biomass to ethanol production is primarily conducted in the Midwest using corn starch as the principal feedstock.

The technologies that will be used in the Gridley project more fully utilize the feedstock to produce numerous useful products while at the same time minimizing byproducts requiring disposal. This will significantly improve the sustainability of the project and the viability of the technology. We believe that the commercialization of this technology will ultimately make the biomass conversion of agricultural wastes to ethanol competitive in a subsidy-free environment.

The construction of the Gridley plant will also develop and commercialize the technologies and processes necessary for the cost-effective use of forest and timber industry byproducts as well as agricultural waste products. Clearly, this plant will expand biomass opportunities to a broad array of industries and agricultural commodities, which will be beneficial to other parts of the state as well as other regions of the country.

Specifically, with respect to the ethanol plants of the Mid-West, our initiative will spawn a whole new generation of technology that will allow these plants to upgrade and become more competitive.

Mr. Chairman, I would like to make one final point: the City of Gridley and its partners are prepared to match, dollar-for-dollar, any funds appropriated for the construction of our proposed biomass ethanol plant. We have the resources available to match the full

$3,000,000 request for fiscal year 1997.

In summary, we believe that the strengths of our project are as follows:

1. The commercialization of this technology will allow for the economic conversion of agricultural and forestry wastes into fuel and electrical energy, and in the process create job growth and eliminate environmental issues;

2. Our initial commercialization of this technology will prove to the financial community the economic viability of the subject processes;

3. The commercialization of this technology will renergize the Midwest ethanol energy by freeing it from subsidy dependence; and,

4. Provide the United States with a new exportable technology to serve areas with abundant agricultural wastes and a need for transportation fuels and electrical energy.

Again, thank you for your past support and for this opportunity to testify. If you have questions regarding our proposal, I would be happy to try to answer them.

Thank you.

Mr. FAZIO. Mr. Chairman, if you would let me just engage in a brief discussion with Tom.

We had learned earlier through Tom's contacts that we have a bit of a problem with the ongoing funding of this. The 1996 funds that were provided by this committee for the biomass ethanol program, which was at least in part going to be made available to the Gridley plant, have been at least planned to be shifted within the budget of the Department of Energy to the biomass power program, which is a different program.

We have, by the way, two large pilot plants currently under way in the biomass power area. This would be in Gridley the first of its kind biomass ethanol plant anywhere in the U.S. When that decision was made, NREL was forced to lay off about 28 percent of its scientists that were doing the research on this particular kind of project. It was really a setback. It puts in jeopardy the effectiveness of the biomass ethanol pilot program generally, and I think it would undermine our success at Gridley.

So I guess I am looking for confirmation from you, Tom, about this point; and I just wanted to highlight it for members of the committee. Because I think it is a good example of where in this case DOE had its own agenda and it didn't coincide with the agenda of this conference committee last year and an area that we ought to look into when we have a chance when the appropriate DOE officials come before us later on.

Mr. SANFORD. That would be my understanding, Mr. Fazio, and certainly not consistent with the committee's conference report last year.

Mr. FAZIO. Thank you very much; and thank you, Jack Slota, as well, the City Manager. Sorry to have held you up.

THURSDAY, FEBRUARY 29, 1996.

TECHNOLOGY TRANSFER

WITNESS

DON R. HARTSELL, PRESIDENT, SOLEX ENVIRONMENTAL SYSTEMS, INC.

Mr. MYERS. I think we will have to stand in recess for a couple minutes here until Mr. Knollenberg gets back. We have about four minutes to go catch a vote, so I again apologize for the delay.

Next up—you can come up to the desk if you like to get prepared—is Don Hartsell, President of Solex Environmental Systems, Incorporated. Your prepared statement, of course, will be in the record.

We will be back in a few minutes. We will stand in recess.

[Recess.]

Mr. KNOLLENBERG [presiding]. Mr. Hartsell.

Mr. HARTSELL. Thank you, Mr. Chairman and members of the subcommittee, for giving me the opportunity to testify.

My name is Don Hartsell. I am President of Solex Environmental Systems, a small business located in Texas. Our experiences with partnering with the Federal Government have produced substantial results.

Today I want to express our sincere appreciation for the opportunity to be a partner with the United States Department of Energy in the technology transfer process. I am also here to recommend ways to ease small business access to the Federal laboratories.

In cooperation with the Department of Energy, we have developed a robotic inspection technology that will significantly improve the safety and efficiency of aboveground storage tanks for petroleum and chemical inventories. This leveraged investment in technology can mean an overall savings of more than $1.75 billion to United States industry. This process will annually prevent more than 200,000 tons of toxic pollution at its source by the year 2010.

With the guidance of the Idaho National Engineering Laboratory, we have the commitment of Exxon at their facilities in New Jersey to participate in the validation of this technology. On the basis of these experiences, I think we must not simply be content that our system for technology development and transfer works. We must make it work better.

To ease the access to the Federal laboratories for small businesses, I recommend the following:

First, when working with a Federal laboratory under a Cooperative Research and Development Agreement, a CRADA, a small business should be granted at the outset the exclusive license of the technology that will be developed. The current policy represents an obstacle to commercialization rather than encouraging it as intended.

Second, specific line-item commitments should be established to fund technology validation in connection with small businesses. Technology development programs often lose critically needed funding, sometimes in mid-project. This puts R&D at jeopardy, potentially creating a serious disability for a small business. Within the laboratory, the principal investigator and the project team are also at risk of being disassembled. Such line-item funding will bridge a critical gap in the CRADA to the commercialization process.

Third, I am recommending that the procurement policy be changed with regard to sole sourcing by Federal agencies. A small business should be able to use its patents to establish a prima facie justification for sole sourcing. Procurement procedures would follow current policy where competitive patents and alternative technologies are known to exist.

Finally, the DOE laboratory should help small businesses attract venture capital by highlighting the results of successful partnerships, for example, through trade fairs and demonstrations. Rapid commercialization would be enhanced by providing workshops on preparing small businesses for working with potential partners.

I wish to conclude by thanking the Chairman for providing me the opportunity to describe our activities and voice our suggestions for improvement. The process does indeed work. The continued support of the Federal laboratories is essential to the long-term prosperity of our country, and I hope that my suggestions will help enhance the technology transfer process and increase the probability of successful deployment from the commercial sector.

Do you have any questions?

Mr. KNOLLENBERG. I don't believe we have any questions; and in an attempt to get through the process of completing everybody's testimony this afternoon, we thank you very kindly for yours. Your entire commentary will be included in the record. Thank you.

[The statement of Mr. Hartsell follows:]

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Statement For the Record

Don R. Hartsell
President
Solex Environmental Systems, Inc.
Energy and Water Development Subcommittee
House Committee on Appropriations
Technology Transfer

February 29, 1996

SOLEX
ENVIRONMENTAL
SYSTEMS, INC.

Statement of:

Don R. Hartsell
President
Solex Environmental Systems, Inc.
Energy and Water Development Subcommittee
House Committee on Appropriations
Technology Transfer
February 29, 1996

Thank you, Mr. Chairman, for giving me the opportunity to testify. My name is Don R. Hartsell and I am President of Solex Environmental Systems, Inc., a small business located in Texas. I am also on the Board of Directors of the University of Houston Center for Applied Technology. I represent the interests of small businesses and encourage their access to the University's facilities for applied research and testing. As background to our testimony, my company's experiences in partnering with the federal government have produced substantial results. In 1985, I started an R&D partnership and was awarded an SBIR by the Department of Transportation to study advanced drying processes to speed up the turn-around of merchant marine chemical tankers while in port.

In 1987, with the support of NASA and the contribution of their high altitude vacuum test chambers at the White Sands Missile test range in New Mexico, we developed a vacuum drying process that enabled our firm to be a part of the largest successful restoration of books in history - the reclamation of the fire and water-damaged book collection belonging to the City of Los Angeles Central Public Library. With this process more than 97% of the collection salvaged out of the ashes of the fire were returned to the library for the use of generations to follow. Originally, the Library of Congress had expressed a hope to see 40% of the collection saved. This successful project is our personal footnote in history. From this project, we developed an appreciation for connecting technology to entrepreneurial vision. We are now recognized as one of the leading professional firms for restoring properties of cultural importance and historic value as a result of our continuous research and development activities. We have been consultants on the restorations of the Windsor Castle in England and the Hofburg Palace in Austria. My company has continued to evolve.

Today, on behalf of Solex Environmental Systems, our employees, families, and partners, I want to express our sincerest appreciation for the opportunity to be a partner with the U.S. Department of Energy in the technology transfer process. I am also here to recommend ways to ease small business access to federal laboratories.

In cooperation with the Department of Energy's Idaho National Engineering Laboratory (INEL), we have developed a robotic tank inspection technology that will significantly improve the safety and reliability of above-ground storage tanks for holding petroleum and chemical inventories. This technology can mean an overall $1.75 Billion in savings for U.S. industry. This process will annually prevent more than 200,000 tons of toxic pollution at its source by the year 2010. As we progress to full commercialization, we will have incorporated a radar positioning technology developed at the Lawrence Livermore Laboratory in California, tested the prototype inspection system at the Rocky Mountain Oilfield Technology Center in Wyoming, and worked with the Office of Industrial Technology as part of their Industries of the Future program. With the guidance of INEL, we have the commitment of Exxon Research and Engineering at their facilities in New Jersey to participate in the validation of the technology. This will place us front and center in our market.

As a spin-out technology, our business plan for rapid commercialization includes establishing a manufacturing facility next to the INEL in Idaho Falls, Idaho. Continued access to the INEL to help support future product and process development makes this a sound business decision. Our plan is presently under consideration by the Idaho Economic Development Council for their regional investment portfolio. This connection is the direct result of the DOE's efforts to encourage diversification and stimulate the local economies surrounding the federal laboratories. With full capitalization of our plans, Solex will create a company that will employ more than 150 people in three years. They will be team members of an advancing technology company.

On the basis of these experiences, I am here to say that the federal laboratories are a national asset. As a nation, we receive value for money through supporting the diverse operations of our federal laboratories. The investment in these core capabilities and competencies as assembled and working represent an engine of change that will push the U.S. economy and our society into the future. To maintain the U.S. edge in technology development, we must be able to directly compete with the Fraunhofer Gesellshaft of Germany and the Tsukuba Science City of Japan. These institutions reflect the commitment of our global competitors to their facilitation of partnerships between their governments and universities and commerce. In response, we must not simply be content with the fact that our system for technology development and transfer works. We must make it work better.

To ease the access to the federal laboratories for small businesses, I recommend the following:

- When working with a federal laboratory under a Cooperative Research and Development Agreement (CRADA), a small business should be granted, at the outset, the exclusive license of the technology that will be developed. A small business entering into a CRADA does not have the legally binding assurance that a license of any kind will result from their investment of precious and limited resources, unless the management policy in effect at the individual laboratories specifies otherwise. This barrier represents a significant risk for the small business since the outcome is unknown. In addition, the laboratory can take the position that the larger the potential economic result of developing a new technology, the more the small business must pay for its license and at the same time place greater limitations on the licensed field of use. The current policy represents an obstacle to commercialization rather than encouraging it as intended. By having the license arrangements settled up front, a small business will be in a better position to attract capital sooner and move toward commercialization more quickly.

- Specific line-item commitment should be established to fund technology validation in connection with small businesses. Technology development programs can lose critically needed funding, usually in mid-project. This puts the R&D investment at jeopardy, potentially creating a serious disability for a small business. Within the laboratory, the principal investigator and the project team are also at risk of being disassembled. At the same time, no project with a small business is so completely under wraps that outside competition is unaware of the ongoing technology development effort. Such projects with great economic potential are at risk to outside competition where faltering budget commitments cut short development continuity. Large companies with extensive internal funding capabilities can seize such opportunities and leave out the small businesses. Such line-item funding will serve to bridge a critical gap in the CRADA-to-commercialization process.

- Procurement policy should be changed with regard to sole sourcing by federal agencies. A small business should be able to use its patents to establish *prima facie* justification for sole sourcing. Procurement procedures would follow current policy where competitive patents and alternative technology are known to exist.

- The DOE laboratories should help small businesses showcase and demonstrate their R&D projects to attract joint venture partners and capital. By providing a small business with assistance, through workshops on developing realistic business plans, the government can enhance rapid commercialization. Technology developed by a small business in partnership with a federal laboratory will automatically have a higher perceived level of credibility. This value-added effort would encourage small business participation to connect technology, vision and, ultimately, the marketplace.

I wish to conclude by thanking the Chairman for providing me with the opportunity to describe our activities and voice our suggestions for improvement. The process does indeed work. The continued support of the federal laboratories is essential to the long-term prosperity of our country, and I hope that my comments will help enhance the technology transfer process and increase the probability of successful deployment from the commercial sector.

CITY OF IDAHO FALLS
Office of the Mayor
City Hall
Idaho Falls, Idaho 83405

Linda Milam
Mayor

February 26, 1996

U.S. House of Representatives
Committee on Appropriations
Subcommittee on Energy and Water Development
The Honorable John Myers, Chairman

Dear Congressman Myers:

On behalf of the City of Idaho Falls, I would like to acknowledge the Department of Energy, Lockheed Martin Idaho Technologies and Solex Environmental Systems for their collaborative efforts at the Idaho National Engineering Laboratory (INEL). As a result of the DOE's initiative to help provide for economic development for our region, Solex Environmental Systems will establish its manufacturing facilities in Idaho Falls for the Petroleum Tank Inspection Delivery System. This new environmentally-friendly technology is the product of the INEL. Our understanding with Solex Environmental Systems is that they will set up their business at the Idaho Innovation Center's small business incubator. Based on this INEL technology spin-out and its commercialization, we believe Solex will provide a positive contribution to the economy of Idaho Falls by creating jobs, providing technical training to local workers, and continuing to develop and design their products at the INEL.

Idaho Falls welcomes and wishes to encourage Solex Environmental Systems' efforts to become a member of our community. Please give your greatest consideration to the continued funding and support for full and rapid commercialization of DOE technologies.

Sincerely,

Linda Milam
Mayor
City of Idaho Falls

LM/ce

cc Congressman Mike Crapo, Idaho 2nd District
Dr. Clyde Frank, Director-Office Technology Development EM-50 DOE
John Denson, President-Lockheed Martin Technologies
Dan Cudaback, President-Eastern Idaho Economic Development Council
Don Hartsell, President-Solex Environmental Systems

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THURSDAY, FEBRUARY 29, 1996.

DOE RESEARCH AND DEVELOPMENT PROGRAMS

WITNESS

BRIAN WILL, ENERGY COMMITTEE, AMERICAN SOCIETY OF MECHANICAL ENGINEERS

Mr. KNOLLENBERG. We next move to Mr. Brian Will on the Energy Committee with the American Society of Mechanical Engineers.

Mr. Will, you are recognized for 5 minutes; and you, too, will have your entire submission included in the record.

Mr. WILL. Thank you. I am Brian Will. I am a member of the Energy Committee of the Council on Engineering of the American Society of Mechanical Engineers, the ASME. I am pleased to have this opportunity to present our views to the subcommittee on the role of the Department of Energy's national laboratories in developing and implementing the energy technology agenda of the United States.

Our committee, whose members represent a broad spectrum of energy-related technology interests, informs the ASME on a wide variety of energy policy matters. The fate of the energy research activities of the national labs is of major concern to us. These laboratories represent a major part of the Nation's Federal R&D infrastructure and are in danger of experiencing significant downward funding pressures in the ongoing budget process.

Recent legislation considered by the House Science Committee would require the Department of Energy to review and, as necessary, revise the missions and operations of the national laboratory structure to accommodate the changing national security posture and budget downsizing of the Federal Government. We concur with congressional efforts to streamline the operations of the national laboratories. To this end, we offer the following observations and recommendations:

We are in general agreement with the recommendations of the Galvin Commission report released last year that suggested the need to redefine the missions of the laboratories in accordance with the changing national security and energy needs of the Nation. In addition, we strongly endorse the efforts of these laboratories to form working partnerships with industry, partnerships that apply the vast and irreplaceable assets of these federally supported facilities to the technology needs of the private sector on a cost-shared basis.

In our judgment, the core competencies that characterize the unique expertise of the different national labs have, through these partnerships, often been successfully applied to resolve major engineering problems faced by the private sector in bringing new technologies to the marketplace. We believe the continuation of these partnerships is essential to the continuing economic well-being of the Nation.

In redefining the missions and goals of the national laboratory programs, the Department of Energy and the Congress are encouraged to seek the counsel of private sector groups, including professional and technical societies, such as ASME, who are representative of the nongovernment stakeholders of the Federal investment in our national laboratories.

We are concerned that efforts to reduce Federal investments in the national laboratory system through streamlining laboratory operations, consolidating programs and perhaps privatization of facilities may well result in terminating certain programs and closure of some facilities that have been the mainstay of the present laboratory activities. It is uncertain what the outcome of these efforts portends for the future of the national laboratory system. In our view, however, it is essential to maintain those programs that directly support the continuation of the industry-laboratory partnerships that have contributed so significantly to enhancing U.S. competitiveness in the global marketplace.

Thank you.

Mr. KNOLLENBERG. Thank you. We appreciate again your testimony; and we recognize, as you do, I know, the budget situation, the pressure on spending and, of course, the entire problems that we have with money. But, again, we appreciate your request and your commentary.

[The statement of Mr. Will follows:]

The AMERICAN SOCIETY of MECHANICAL ENGINEERS

FOUNDED 1880

Statement on the Role of the National Laboratories in the National Energy Agenda

Submitted by

The Energy Committee
of the
Council on Engineering

of the

American Society of Mechanical Engineers

to the

Subcommittee on Energy and Water
Committee on Appropriations
U.S. House of Representatives
February 29, 1996

The American Society of Mechanical Engineers
1828 L Street, N.W., Suite 906
Washington, DC 20036-5104
(202) 785-3756

I am Brian Will, a member of the Energy Committee of the Council on Engineering, of the American Society of Mechanical Engineers (ASME), and I am pleased to have this opportunity to present our views to the subcommittee on the role of the Department of Energy's national laboratories in developing and implementing the energy technology agenda of the United States. This Committee, whose members represent a broad spectrum of energy related technology interests, informs the ASME Council on Engineering on a wide range of energy policy matters. The fate of the energy research activities of the national labs is of major concern to us. These laboratories represent a major part of the nation's federal R&D infrastructure, and are in danger of experiencing significant downward funding pressures in the ongoing budget debates.

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We are in general agreement with the recommendations of the Galvin commission report released last year that suggested the need to redefine the missions of the laboratories in accordance with the changing national security and energy needs of the nation. In addition, we strongly endorse the efforts of these laboratories to form working partnerships with industry that apply the vast and irreplaceable assets of these federally supported facilities to the technology needs of the private sector on a cost shared basis. In our judgement the core competencies that characterize the unique expertise of the different national labs have, through these partnerships, often been successfully applied to resolve major engineering problems faced by the private sector in bringing new technologies to the marketplace. We believe the continuation of these partnerships is essential to the continuing economic well-being of the nation.

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This statement has been prepared by the Energy Committee of the ASME Council on Engineering, and has been endorsed by the ASME Inter-Council Committee on Federal R&D. This statement reflects the expert views of the members of these committees and is not necessarily a position of the ASME as a whole.

THURSDAY, FEBRUARY 29, 1996.

SOLAR PROGRAMS

WITNESS

DAVID L. BLOCK, DIRECTOR, FLORIDA SOLAR ENERGY CENTER

Mr. KNOLLENBERG. We have now Dr. Block, Dr. David Block, who is the Director of the Florida Solar Energy Center.

So, Dr. Block, you are recognized for 5 minutes; and your total commentary will be included in the record.

Mr. BLOCK. Thank you, Mr. Chairman and the subcommittee, for this opportunity to present my views.

I want to just take a couple of minutes to make just a couple quick, very quick points. Number one, I am going to try to use a couple very fast visual aids here.

Photovoltaics as a piece of processed silicone is one of the best opportunities we have to develop new living-wage jobs in the U.S. Mr. Forest behind me, in fact, manufactures the cell; and he will be your next speaker, so I will leave that to him.

All this semiconductor does is generate electricity when it is exposed to sunlight. I am sure you know it has no noise, no moving parts and no pollution. This may sound like a miracle, but it is just a technology and, like all technologies, this solar cell has to be made by human beings, and this is where jobs come in. There are a variety of workers that are needed to manufacture, to process, to make solar cells. In the end, every million dollars expended directly in photovoltaics creates 21 jobs in a U.S. led industry with a growth potential greater than any other in the energy arena.

This brings me to point number two. Technology's potential is only as big as its market, and the market is only as big as the people's need for the technology.

Very quickly, I will show you a puzzle here which represents our planet from space and its existing population. If I take away this piece, this represents the three billion inhabitants in the developed countries of our world. These people couldn't dream of life without power for air conditioners, TV, computers and, much less, electrical-driven GDP.

This next section represents the developing nations that are striving to reach our level of consumer comfort and GDP.

Left is the last piece, and this is the piece of the population that has no access to electricity, two billion people.

So, what do we have? We have two billion people who desperately need lights in their schools, clinics and homes, pumps for clean water, refrigeration for crops, electrical power assistance for their own economic development. This is the PV market. Two million people without electricity.

This brings me to point number three. Just as the internal combustion engine is not a car, this PV cell here is not a solar system. Imagine if Henry Ford had simply sold engines, leaving the rest to the consumer. Unreliability, high cost, system failures would likely have killed the U.S. auto industry before it had a chance. As it is, it took a Japanese demonstration of system engineering for the Big Three to learn that not only engines sell, total system quality does.

That is why, despite technical appeal, a solar cell isn't a solar energy system.

I am going to finally give you one more demonstration, which is the parts here of a disassembled solar calculator. As you can see, there are many bits and pieces of plastic, wire and wafer that have to be carefully designed, manufactured, assembled and tested to end up with a solar system that is both reliable and effective. In other words, a total solar energy system gives us, as I have in my pocket, a solar-powered pocket calculator. That is the role of the photovoltaic regional experiment stations that I am really here to talk today about, ensuring that a U.S.-made PV system, whatever its size and purpose, is reliable as the pocket calculator I have just shown you.

Mr. Steve Duran in the back is my colleague from New Mexico, and we in New Mexico and Florida are helping the U.S. solar industry build and test high-quality photovoltaic systems from applications for utility-powered Sacramento to vaccine refrigerators in San Salvador.

Let me make this point, and I will quit. The U.S. is currently a world leader in the manufacture and export of PV cells and modules, but remember the history of the automobile technology. Ford's customers didn't want engines, they wanted quality transportation systems, and that is what he gave them. We now face Ford's choice for developing global power market. The U.S. can give them solar cells and let somebody else corner the solar applications market or we can seize this golden opportunity to create jobs in the U.S. by creating high-quality systems not only for Americans but for the rest of the world.

I thank you for your attention, and I would be happy to respond to questions.

[The statement of Mr. Block follows:]

Testimony on
Photovoltaics: The Economic Development Opportunity

by

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and

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Submitted to:
U.S. House of Representatives
Subcommittee on Energy and Water Development
Committee on Appropriations

February 29, 1996

Summary

This testimony makes three important points that we ask you to consider in allocating resources to support U.S. economic development through energy technologies

- Photovoltaics (PVs) are one of the best energy technologies we have to develop new, living-wage jobs in the U.S., creating 10 times as many jobs per dollar expenditure as conventional power production technologies

- The existing market for photovoltaics is largely an export market, comprising one-third of the world's population -- two billion people who currently lack electrical supplies for even such basic energy services as lights, refrigeration and communications.

- Because this huge market will be filled not by PV solar cells alone but by high-quality PV-powered systems, our national opportunity lies not only in manufacturing PV solar cells but also in conducting systems R&D to produce quality solar systems that meet the needs of the growing global population of new consumers

The Photovoltaic Regional Experiment Stations of the Florida Solar Energy Center and New Mexico State University are focused on this economic development opportunity. With the support of Sandia National Laboratories, we are helping U.S. manufacturers develop higher-quality PV solar systems that are more competitive in both the U.S. and global marketplace. We are requesting that $1,000,000 from the photovoltaics program funds be made available to the Southeast and Southwest Regional Experiment Stations to continue these ongoing programs.

Statement

We want to begin by thanking Chairman Myers and the Subcommittee for this opportunity to present our views on the challenges facing the country -- and our states -- in terms of energy technology and economic development.

Perhaps more than any other energy technology, photovoltaics (PV) offer the greatest potential for job creation Facts show that photovoltaics account for 10 times more jobs per unit of expenditure than the traditional energy industries. But facts also show that just about every person in the U.S. already has affordable access to power generated by fossil or nuclear plants and provided by a distribution system that is the envy of the world.

So if we've already got plenty of power through conventional technology, where's the opportunity for photovoltaics?

The answer is, all over the globe

Today, fully half the population base of the world's developing nations -- two billion people -- has **no** access to electricity Without power for health, education, communications, commerce and industry, these two billion people cannot become producers, much less consumers. Without energy, they will continue to be a drain on their countries' economies and thus a threat to political and societal stability

The lining behind this cloud isn't made of silver -- or oil or coal or even uranium. It's made of silicon fashioned into photovoltaic solar cells.

These solid state-electronic devices convert sunlight directly to electricity; they have no moving parts, produce no pollution and require no fuel. Perhaps most appealing to developing nations, PV is a modular technology that allows the right amount of power to be made available at the site where it is needed With photovoltaics, it doesn't require a billion dollar investment in a 500 megawatt power plant, and hundreds if not thousands of miles of wires, to get power to a remote village, school or clinic. It takes just enough solar array to meet the demand of the load.

Successful entrepreneurs know that where there is a market, there is opportunity. It's no wonder that photovoltaics manufacturers (the world's new energy entrepreneurs) increased their output by 20 percent last year and exported 70 percent of their product to the developing nations.

The U.S. is ranked first in photovoltaic manufacturing, but the lead it holds is tenuous. Europe has already passed Japan as the second largest photovoltaics producer, and if Siemens, which owns our country's largest PV manufacturer, is counted as European, then the U.S. falls to third place, and European output is actually double that of both America and Japan. More bad news: Last year another German consortium bought control of Mobil Solar, and they are intent on targeting the large off-grid market for photovoltaics in Mexico and South America -- our customers.

No matter who owns it, photovoltaic cell technology will continue to advance. Material and manufacturing developments have already lowered the cost of photovoltaic cells from $700 per watt in the 1960s to just $5 per watt today. At their new plant in Virginia, the Enron/Amoco partners have a goal of producing solar cells for power at 6 cents per kilowatt hour, making photovoltaics competitive with conventional power sources even in the United States.

But even if the U.S. can manufacture the best and least expensive photovoltaics, we'll miss out on half the market if we focus on cells alone and forget the systems. Like Henry Ford, we have to remember that consumers don't want to buy the technology; they want to buy the benefits of a superior system.

Even though it was the technological marvel of its time, Ford saw that people didn't want to buy an internal combustion engine; they wanted to buy transportation. Indeed, if Ford had just sold engines and left the rest to the customer, unreliability, high cost and system failures would have killed the U.S. auto industry before it had a chance. As it is, it took a Japanese demonstration of system engineering for the Big Three to learn that engines don't sell cars, total system quality does.

That's why, despite its technological appeal, a solar cell doesn't sell a solar system. But if you carefully design, manufacture, assemble and test all the parts powered by photovoltaics, you end up with a solar system that is so reliable and effective, it can become as ubiquitous as the solar-powered pocket calculator.

That's the role of the Photovoltaic Regional Experiment Stations -- to ensure that every U.S.-made PV system, whatever its size or purpose, is at least as reliable and marketable as a solar calculator. With the aid of Sandia National Laboratories, Dr. Schoenmackers' and my institutes in New Mexico and Florida are helping U.S. industry design, build and test the highest quality photovoltaic systems for applications from utility power generation in Sacramento to vaccine refrigeration in San Salvador.

At the Southeast and Southwest RESs, our research concentrates on photovoltaic system applications and components, especially such problematic devices as charge controllers and batteries for solar energy storage. We help battery, controller and photovoltaic manufacturers improve the performance of their individual products in full system operation. Our industry partners here include Solar Outdoor Lighting in Stuart, FL; Daystar Corp. of Las Cruces, NM; Remote Power Systems Inc. of Ft. Collins, CO: Solar Works of Montpelier, VT; Solar Engineering of Seattle, WA; and Polar Power of Torrance, CA.

We also assist U.S. utility companies, such as Florida Power & Light and Pacific Gas and Electric, in designing and testing photovoltaic systems as an option to support their own growth and diversification. Together, these activities make photovoltaic systems more reliable and cost-effective, which makes them more appealing to energy equipment purchasers in developing countries, as well as the U.S.

Our programs are opening up important export markets for U.S.-made photovoltaic systems in Mexico and Central and South America. Through workshops and training programs, technical assistance and project implementation we are assisting the U.S. photovoltaic industry to establish a presence in these rapidly growing markets.

The U.S. is currently the world leader in the manufacture and export of PV cells and modules, but we still face Ford's choice in the developing global power market. The U.S. can simply produce solar cells and let someone else corner the solar applications market, or we can seize this golden opportunity to create jobs in the U.S. by creating the highest quality engineered solar systems not only for Americans but also for the rest of the world.

For Fiscal Year 1996, the Energy and Water Appropriations Bill stated that: "From within the available photovoltaic funds, an addition of $1,000,000 should be made available to support the ongoing research in photovoltaics being conducted by the Southeast and Southwest Regional Photovoltaic Experiment Stations." In order to support the market need for photovoltaic systems research, development and testing, we request that Congress continue to support the RES's photovoltaic systems work at a consistent level of $1,000,000.

We thank you for your attention and will be happy to respond to any questions.

Mr. KNOLLENBERG. Just a comment, not a question. I know you mentioned there are no moving parts, there is no fuel required and there is no pollution, and there is no noise either, I would take it. I learned to appreciate that just the other evening with the noise that occurred in my neighborhood. But anyhow, thank you very kindly for your testimony.

Would I help you with those parts, but——

Mr. BLOCK. Well, fortunately, I had a nice, big piece to put them on.

Mr. KNOLLENBERG. We appreciate the testimony, and obviously if there is any inclusion that you didn't mention, it will be in the record.

THURSDAY, FEBRUARY 29, 1996.

SOLAR PROGRAMS

WITNESS

HARVEY FOREST, PH.D., PRESIDENT AND CEO, PHOTOVOLTAICS, SOLAREX, AMOCO/ENRON SOLAR, FREDERICK, MD

Mr. KNOLLENBERG. Our next witness to appear before the panel is Dr. Harvey Forest who is President and CEO of Photovoltaics Solar Recollection.

Please tell me, when you get seated, from where you come.

Mr. FOREST. Frederick, Maryland.

Mr. KNOLLENBERG. Oh, all right. You are recognized for 5 minutes, and the totality of your inclusionary material will be in the record.

Mr. FOREST. I am Harvey Forest and I am the CEO for the Solar Recollection Business Unit of Amoco/Enron Solar.

Thank you for this opportunity to present our recommendations for fiscal year 1997 appropriations for the DOE Photovoltaics Technology Program. I don't have any props; all of the previous speakers have used them quite eloquently, and my testimony is in four parts.

First, I would like to suggest a new vision of PV as a strategic technology, because I believe a fresh look at PV by the Congress and the DOE is warranted.

Second, I will summarize the results of Amoco/Enron Solar's first year of operations, because I believe our results accurately mirror the progress of the U.S. PV industry and speak to the need for a fresh look at PV.

Third, I will recommend a balanced approach for the 1997 budget which supports technology development and rapid commercialization of grid-tied markets.

Fourth, I will recommend that Congress direct the Secretary of Energy to undertake a review of the strategic priorities of the U.S. PV program, seeking input from market-driven PV companies.

I will now go into some elaboration of each of those points.

Many of the renewable energy technologies, including PV, are at the beginning of their life cycle. In many cases, new technologies enable one another, so that one innovation leads to numerous others. PV is such an enabling technology.

A technology intended by the Department of Energy as an option for central space and power in the U.S. is now enabling thousands of rural families to enjoy electric light and television for the first time. It is bringing the benefits of electric appliances to developing areas of the world where traditional power grids may not reach for decades, if ever.

On a broader scale, it now appears unlikely that resources will be available to allow rural electrification to proceed globally following the model of grid extension used in the United States and other developed countries. Moreover, the same situation exists in the expansion of the current telecommunications networks on a global scale. So, technologies that allow energy and communications infrastructure to be built up without networks of wires will provide high-value products to satisfy the growth of the new communications industry.

It takes a bit of imagination to realize that PV will play a crucial role in this new distributed infrastructure paradigm. I believe the time has come for inclusion of the broader value of PV in the planning and execution of our national program.

I urge the Congress to determine and direct that PV should be managed as a strategic asset, not just an energy option to be used when and if cheap fossil fuels are no longer cheap, but also as an enabling technology for other growing industries.

In the first year of our joint venture, the Amoco/Enron Solar joint venture executed the first year of its business plan and validated the assumptions on which the plan was based. Specifically, the solar recollection business unit, the technology arm of the joint venture, achieved record revenues and shipments, significantly expanded production capacity, increased our workforce, and completed the design and started construction of a new thin film factory, located in Virginia.

Solar recollection also sold rooftop, grid-tied PV systems based on current generation technology at prices within a factor of two of the cost threshold for explosive market growth. Over the past 2 years, solar recollection continued to increase its sales to global remote power markets while tripling its sales to grid-tied markets to more than 20 percent of our shipments.

Meanwhile, the Amoco/Enron Solar Power Development Business Unit, the power marketing part of the joint venture, validated the ability to develop independent power projects, selling electricity from large PV arrays to utility grids around the world. The competitive economics of such projects are based on using thin film PV modules similar to the ones we will produce in our plant in Virginia. Such projects can be profitable and competitive with projects based on fossil fuels or other renewable technologies in areas receiving better-than-average annual accumulations of solar radiation.

Over its history, the U.S. Department of Energy PV program has done an excellent job striking a balance between two major categories of activities. These categories are one, building the knowledge base for technical progress; and two, working with our industry to tackle the technology barriers to rapid commercialization.

My message to you is simply that this strategy must be sustained. It is important to Amoco/Enron Solar and the entire PV industry that the DOE respond to budgetary pressures in a way that preserves this essential balance. Further, it is important that program balance reflect our industry's readiness to begin developing grid-tied markets for PV, along with finding ways PV can enable the long-term optimization of U.S. communications infrastructure and distributed energy systems.

In many cases, this will mean strengthening and adjusting certain elements of the DOE program, while completing others as planned, rather than simply making across-the-board adjustments.

Mr. KNOLLENBERG. Could you just conclude then briefly, if you would.

Mr. FOREST. We are confident a balance can be struck and we would like to share our experience with those charged with accomplishing this difficult task. For this reason, I urge the Congress to require the Secretary of Energy to conduct a thorough and open review of the program's priorities and report the results to this and other relevant committees of the House and Senate.

Thank you.

[The statement of Mr. Forest follows:]

Testimony

by

Dr. Harvey Forest
Chief Executive Officer
Photovoltaics
Amoco/Enron Solar
Frederick, Maryland

Before the

House Subcommittee on Energy and Water Development

on

Fiscal Year 1997 Budget Recommendations for

Solar Energy Programs

of the

United States Department of Energy

February 29, 1996
Washington, D.C.

23-238 2162

My name is Harvey Forest and I am the CEO for the Solarex Business Unit of Amoco Enron Solar. Thank you for the opportunity to present Amoco/Enron Solar's recommendations regarding FY97 appropriations for the USDOE Photovoltaics (PV) Technology Program. My testimony will be in four parts.

Recommendations

First, I will suggest a new vision of PV as a strategic technology, because I believe a fresh look at PV by the Congress and the USDOE is warranted.

Second, I will summarize the results of Amoco/Enron Solar's first year of operations, because I believe our results accurately mirror the progress of the US PV industry and speak to the need for a fresh look at PV.

Third, I will recommend a balanced approach for the 1997 budget which supports technology development and rapid commercialization of grid-tied markets.

Fourth, I will recommend that Congress direct the Secretary of Energy to undertake a review of the strategic priorities of the US PV program, seeking input from market-driven PV companies.

A New Vision of PV as a Strategic Technology

As you know better than I, the rationale for US energy technology programs is based on concerns of energy independence and the long-term costs and availability of fossil fuels. Many of our emerging energy options, including PV, have progressed with the support of USDOE programs. Congress can rightly take pride in the accomplishments of these programs and their contribution to US energy security and fuel efficiency.

Many of these technologies are at the beginning of their life cycle. One does not need to look far to see examples of technologies developed to meet one need being put to use to meet another need. In many cases, new technologies enable one another, so that one innovation leads to numerous others. PV is such an enabling technology. A technology intended by the USDOE as an option for central station power in the US is now enabling thousands of rural families to enjoy electric light and television for the first time. It is bringing the benefits of electric appliances to developing areas of the world where traditional power grids may not reach for decades, if ever.

On a broader scale, it now appears unlikely that resources will be available to allow rural electrification to proceed globally following the model of grid extension used in the US and other developed countries. Moreover, the same situation exists in the expansion of the current telecommunications networks on a global scale. So, technologies that allow energy and communications infrastructure to be built up without networks of wires will provide high value products to satisfy the growth of the new communications industry. In addition, PV systems and wireless communications networks can be deployed immediately and not suffer from the long lead times of networks based on wires.

It takes a bit of imagination to realize that PV will play a crucial role in this new distributed infrastructure paradigm. I believe the time has come for inclusion of the broader value of PV in the planning and execution of our national program. I urge the Congress to determine and direct that PV should be managed as a strategic asset, not as just another energy option to be used when and if cheap fossil fuels are no longer cheap, but also as an enabling technology for other growing industries.

This review should look at the consequences of "business-as-usual" as well as the opportunities that will develop from a fresh look. The average citizen can easily understand that the entire planet cannot use fossil fuels at the rate we consume in the US without an economic and environmental impact. Yet we have no policy or plan to anticipate what will happen when the developing countries significantly increase their energy consumption.

Amoco/Enron Solar Progress

In its first year, the Amoco/Enron Solar joint venture executed the first year of its business plan and validated the assumptions on which the plan was based. Specifically, the Solarex business unit, the technology and manufacturing part of the joint venture, achieved record revenues and shipments, significantly expanded production capacity, increased our workforce, and completed the design and started construction of TF1, a full-scale factory for production of the next generation of commercial PV technology. Solarex also sold rooftop, grid-tied PV systems based on current generation technology at prices within a factor of two of the cost threshold for explosive market growth. Over the past two years, Solarex continued to increase its sales to global remote power markets while tripling its sales to grid-tied markets to more than 20% of overall shipments.

Meanwhile, the Amoco/Enron Solar Power Development business unit, the power marketing part of the joint venture, validated the ability to develop independent power projects, selling electricity from large PV arrays to utility grids around the world. The competitive economics of such projects are based on using thin film PV modules produced in factories like TF1. Such projects can be profitable and competitive with projects based on fossil fuels or other renewable technologies in areas receiving better-than-average annual accumulations of solar radiation. Such areas exist in the "sunbelt" of the globe, and are also close to major population centers and regions of high electricity demand growth.

A Balanced Program is Needed

Over its history, the USDOE PV technology program has done an excellent job striking a balance between two major categories of activity. These categories are: building the knowledge base for technical progress, and working with our industry to tackle the technology barriers to rapid commercialization. My message to you is simply that this strategy must be sustained. It is important to Amoco/Enron Solar and the entire PV industry that the USDOE respond to budgetary pressures in a way that preserves this essential balance. Further, it is important that program balance reflect our industry's readiness to begin developing grid-tied markets for PV, along with finding ways PV can enable the long-term optimization of US communications infrastructure and distributed energy systems. In many cases, this will mean strengthening and adjusting certain elements of the USDOE program, while completing others as planned, rather than simply making across-the-board adjustments.

We are confident a balance can be struck, and we would like to share our experience with those charged with accomplishing this difficult task. We can best articulate our views and contribute our expertise in the context of a process to examine and up-date overall program priorities. For this reason, I urge the Congress to require the Secretary of Energy to conduct a thorough and open review of the program's priorities and report the results to this and other relevant committees of the House and Senate. Such a review is overdue. The review should include input from various sources, including market-driven PV companies. Its results can be used to assure that the USDOE program provides effective support of the US PV industry's on-going success in global markets. This review will guide future expenditures to provide US taxpayers the maximum return on their strategic investment in PV technology.

Mr. Knollenberg. I just have one comment very quickly.

This is your first year of operation, and the Amoco/Enron partnership question I have is have you had any presence in India?

Mr. Forest. Yes.

Mr. Knollenberg. In terms of the projects that you have outlined?

You do have?

Mr. Forest. Yes. There are, in fact, two projects in India.

Mr. Knollenberg. I just happened to return from India, and that was one of the things that I was looking for. There was talk of that kind of development, but you do have—

Mr. Forest. There is one project in Rogerstown that has been recently announced.

Mr. Knollenberg. Thank you very much for your testimony. We appreciate that.

Thursday, February 29, 1996.

BASIC ENERGY SCIENCES

WITNESS

DONALD E. JOST, PH.D., EXECUTIVE DIRECTOR, THE COUNCIL FOR CHEMICAL RESEARCH

Mr. Knollenberg. We will move on to Dr. Donald Jost, Executive Director of the Council for Chemical Research, and he is coming to the table.

You are recognized for 5 minutes, and all of your material will be included in the record.

Mr. Jost. Thank you very much.

My name is Don Jost and I am the Executive Director of the Council for Chemical Research. I am very pleased to have the opportunity to testify before you today regarding the basic energy sciences program of the U.S. Department of Energy.

The members of our organization are companies, universities and government research laboratories that conduct research in chemical sciences and engineering. They are represented in CCR by vice presidents, directors, managers, deans and department heads, but the primary responsibility is for the chemical aspects of the research and development activities.

I want to begin by thanking this subcommittee for its leadership in support of BES for fiscal year 1996. We heartily agree that this research is an essential part of the national energy program and represents progress that must be continued. Continuity in research is vital, and the level of funding provided has assured this to date.

We are also aware that efforts to deal with the Nation's budget deficit will necessitate increasing scrutiny of all federally-funded programs. Yet, we strongly believe that the government's investment in basic energy sciences must be sustained at a level no lower than the fiscal year 1996 appropriation, and that it should maintain pace with the cost of living.

Why do we need to continue to invest in energy research at this level? DOE's investment in energy R&D is only 0.5 percent of America's annual energy bill today, yet this one-half of 1 percent of today's expenses will provide the new technology that we will need to meet our voracious energy demands in the 21st century.

Energy is fundamental to the ability of industrialized societies to function and the U.S. is becoming increasingly dependent on foreign oil. The BES goal is to make energy and energy-intensive processes cleaner, cheaper, faster and better. From CCR's own multi-sector perspective, we see BES programs as bringing the best talents of our national laboratories, academia and industry to bear on the task of achieving its goal.

We are most familiar in our organization with the chemical and materials activities within BES, the Chemical Sciences Division oversees a broad range of basic research in molecular, atomic and chemical engineering sciences that are necessary for the improvement of existing energy technologies and the development of new ones. The Material Sciences Division supports fundamental scientific research into materials and their properties. Both support national user facilities that enable experiments in their respective areas of responsibility.

Federal support for R&D is most strongly justified when it serves national interests that are not adequately addressed by market action alone. But that should not mean that the benefits of government-sponsored research should not be market-relevant.

I would like to give you an example of a recent advance that has yielded not only energy, but environmental and marketplace benefits.

A new process is now used commercially that enables more energy efficient production of certain plastics. The enabling science was conducted by Northwestern University under a process supported by the BES Division of Chemical Sciences. The plastics are currently being used in the front fascia of the Pontiac Bonneville, in heavy-duty extension chords, in insulation, in air conditioners, and in other applications.

To summarize, your unwavering commitment to the longer view is essential. To assist you, we promise to help substantiate the relevance of energy research, to articulate the public benefits of the Nation's investment in it, and to suggest and evaluate the impacts of alternatives in the context of real budget parameters.

Thank you very much.

Mr. KNOLLENBERG. Thank you.

We know that research sometimes isn't at the top of everybody's list, that is a concern I know that you have, and we will do our best to accommodate what we can for you.

Thank you very much for your testimony.

[The statement of Mr. Jost follows:]

Council for
Chemical
Research, Inc.

STATEMENT

of

DR. DONALD E. JOST

on behalf of

THE COUNCIL FOR CHEMICAL RESEARCH

on

FY 97 FUNDING FOR BASIC ENERGY SCIENCES

presented to the

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

COMMITTEE ON APPROPRIATIONS

U.S. HOUSE OF REPRESENTATIVES

February 29, 1996

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CCR'S VIEWS ON FUNDING FOR DOE BASIC ENERGY SCIENCES

- The members of the Council for Chemical Research (CCR) are companies, universities, and government research laboratories that conduct research in chemical sciences and engineering. They are represented in CCR by vice presidents, directors, deans, and chairs with primary responsibility for chemical R&D.
- CCR wishes thank this subcommittee for its leadership in support of BES for FY 96.
- We believe that the "E" in DOE stands for energy security, and basic energy research is an essential investment in our Nation's future energy security.
- We strongly believe that the government's investment in BES must be sustained at a level no lower than FY 96, and that it should maintain pace with the cost of living.
- As the Congress struggles to rein in our national budget deficit, tough choices will have to be made. While energy's importance may be understood by the American public, the role of energy research is not easily understood.
- Your unwavering commitment to the longer view is essential. To assist you, we promise to help substantiate the relevance of energy research, to articulate the public benefits of the nation's investment in it, and to suggest and evaluate the impacts of alternatives in the context of real budget parameters.

Mr. Chairman and Members of the Subcommittee:

My name is Donald Jost and I am the Executive Director of the Council for Chemical Research (CCR). I am pleased to have the opportunity to testify before you today regarding the Basic Energy Sciences (BES) program of the U.S. Department of Energy (DOE). I am speaking on behalf of CCR, an organization whose members are companies, universities, and government laboratories that conduct research in chemical sciences and engineering.

BES advances the information base for the Nation's energy technology development in ways that strengthen our science and engineering resources. In essence, the BES goal is to make energy and energy-intensive processes cleaner, cheaper, faster, and better. From CCR's own multi-sector perspective, we see BES programs as bringing the best talents of our national laboratories, academia, and industry to bear on the task of achieving its goal. We are most familiar with the chemical and materials research activities within BES. The Chemical Sciences Division oversees a broad range of basic research in molecular, atomic, and chemical engineering sciences necessary for improvement of existing energy technologies and development of new ones. The Materials Sciences Division supports fundamental scientific research into materials and their properties. Both support national user facilities that enable experiments in their areas of responsibility.

We wish to begin our testimony by thanking this Subcommittee for its leadership in support of BES for fiscal year 1996. We heartily agree that this research is an essential part of the national energy program and represents progress that must be continued. Continuity in research is vital, and the level of funding provided has assured that to date.

We are also aware that efforts to deal with the Nation's budget deficit will necessitate increasing scrutiny of all programs categorized as domestic and discretionary. The absence of a detailed budget proposal to which this statement can respond is evidence of the turmoil that already surround these efforts. Yet, we strongly believe that the government's investment in Basic Energy Sciences must be sustained at a level no lower than the fiscal year 1996 appropriation, and that it should maintain pace with the cost of living.

We understand that this may be easier said than done in a time when the decisions you must make will only get harder. We want to help, beginning with this statement, by substantiating the relevance of energy research, helping to find ways to articulate the public benefit of the nation's investment in it, and helping to incorporate "good science" into the policy-making process. Our perspectives are drawn from our knowledge as scientists and researchers, our experiences as decision-makers in industry, government, and academia, and our interests as citizens in the well being of our Nation. We hope that this effort opens an ongoing dialogue with you. We want to be there with you for the tough decisions, to help you come up with alternatives and assess the impacts of possible decisions, keeping our eyes firmly on the goal of keeping our energy research base healthy and productive.

Why Invest In Energy Research

In deciding government's support for any activity, the purpose for the government's involvement must be clear. While there is much discussion about the mission of the Department of Energy, we believe that, fundamentally, the "E" in DOE has consistently stood for energy security. We read with interest the final report of the Secretary of Energy's Task Force on Strategic Energy Research and Development (the "Yergin report") which was published last June. This report summarizes important trends, including:

- Energy is fundamental to the ability of industrial societies to function, and the demand for energy is growing world-wide
- The U.S. is a declining oil producer that continues to be heavily dependent on foreign oil. The world oil market is stressed and continues to be politically vulnerable
- DOE's investment in energy R&D is only 0.5% of America's annual energy bill
- These R&D activities have contributed a great deal to the energy successes of the last 15 years, while contributing to our standard of living, new products and processes, new jobs, and new opportunities.

We agree with the view expressed in the Yergin report that energy is so central to the vitality of our dynamic country that it must be one of our top national issues. Research sponsored by BES yields useful knowledge and better knowledge systems that are aimed at energy problems but yield a much broader benefit to the nation. Within DOE, BES supports efforts to replace or extend energy supplies and improve and enhance the environment. Through its funding to universities, BES sustains research activities that provide knowledge products and a training ground for the science and engineering workforce to sustain our future. By interacting with industry, BES gains an understanding of needs and market considerations that help shape its research strategies. Through user facilities, BES supports the DOE mission and all of its research constituencies.

Federal support for R&D is most strongly justified when the R&D serves national interests not adequately addressed by market action alone. But that should not mean that the benefits of government-sponsored research should not be market relevant. To paraphrase the Galvin report on the future of the national laboratories, one of the beauties of basic research is the potential to have a transforming, yet unknowable impact. Two cases in point:

- A new process now in the marketplace enables more efficient production of plastics that are more energy efficient than previously possible. The enabling science was conducted at Northwestern University under a project funded by BES' Division of Chemical Sciences. The plastics are currently being used on the front facia of Pontiac Bonnevilles, heavy-duty extension cords, and the black foam insulation in your acir conditioner, among other products.

- Through BES-sponsored research, processes that reduce toxic and radioactive waste were discovered. One application is removal of iron contaminants in the production of silicon wafers. These processes are now being commercialized by three companies, one of which was formed with financial support from the state of Illinois. To date, that company has 25 employees and annual revenues of $4 million.

- A new solder alloy was discovered as a result of BES-supported research that enables better and safer industrial soldering. This solder solved long-standing limitations of soldering materials -- which were primarily lead (workable but toxic) and tin-silver (not toxic but less workable). One application: non-toxic solder paste for state-of-the-art electronics packaging.

- The Buckminsterfullerene is a new form of carbon that was developed and characterized as a result of research supported by BES. There is great excitement about the potential of the "Buckeyball", whose properties include absorbancy and superconductivity. As profiled in a recent NOVA program on PBS, there are many small start-up companies racing to find applications and markets for the Buckyball.

These "victories" are significant because they exemplify the achievement of the better, faster, cheaper, cleaner objectives that BES strives for to enhance our energy security. They may not be as dramatic as some success stories. Research is similar to legislation in that you may do a lot of it, but only a small percentage makes the front page. But, this is how basic research works -- through thousands of insights, new directions, new phenomena, new principles, materials and processes that are the return on the Nation's energy research investment.

What's at Stake

The threats to our energy security include energy supply disruption and shortage, loss of competitive capability, and diminished quality of life. These threats bespeak urgency and crisis. But, basic energy research involves long time horizons and does not lend itself to characterization in terms of quadrillion BTUs contributed. It represents future options and preparedness. Commitment and continuity are vitally important to getting the return on the investment in this research -- and to sustaining the infrastructure that enables it.

It takes a lot of effort to understand and appreciate what is contributed by basic energy research and what would be lost if the research were not sustained.

BES continually strives to improve understanding and communicate the benefits of its activities. It assesses progress quantitatively in terms of the number of scientists supported, the number of students earning advanced degrees, the number of researchers who access the user facilities, the number of articles published in peer-reviewed journals, the number of awards and citations for funded researchers and their work, and the number of CRADAs, inventions, and patents that result from supported activities. BES also strives to articulate qualitative benefits by looking at success stories, the quality of the new knowledge that is gained, the usefulness of the technology developed, and the longer-term benefits to society. Data for these metrics is readily available but not included here in the interest of space.

But, while hese measures are meaningful indicators of what is at stake within the overall context of federal research, the real difficulty in making the case for R&D occurs when it is being measured against programs that the public understands more readily. In the absence of a relevant crisis that engages the broader public (such as the gas lines of the early 1970's), one of the challenges is to show how many "small" victories, future "unknowables", and a strong science and technology resource base add up to a competitive public benefit.

Much is at stake as the Congress struggles with the appropriations for FY 97 and beyond. Sustaining support for BES will require researchers to more effectively communicate the relevance of what we do to those who are less in tune with research and to take responsibility for helping to assure that spending decision reflect the best interests of the nation, and it will require an unwavering commitment by congressional leaders to the longer view.

Concluding Summary

Research is an investment for the future. Energy research is an essential investment in our future because of the vital role of energy to the functioning of our country and the uncertainty of future energy supplies. The Basic Energy Sciences program of the Department of Energy seeks to provide the knowledge base and develop the human and scientific resources that are needed to assure our energy security.

The Congress is struggling to do the hard but necessary job of reining in our national budget deficit, and tough choices will have to be made. While energy's importance to our economy and quality of life may be understood by the American public, the role of research -- especially basic research -- to our energy security is not easily understood. Most citizens would not place research at the top of the list of priorities for government support, particularly when it is stacked up against programs that have a more obvious connection to their daily lives.

We believe that a strong case can be made for sustaining the level of support for the Basic Energy Sciences program in real dollars, but that it will take substantial commitment and leadership on all our parts to successfully advocate for the future when a painful pinch is being felt today. We, as scientists, must facilitate understanding and communication of the fact that, as an investment, basic research cannot appropriately be treated as a current expense. Because of the long-term payout, the impact of cuts made now might not be felt for a decade, but would have crippling consequences after that in terms of lost scientific knowledge, infrastructure, and human capital.

We pledge to do our part to carry the message forward and to assist you in this endeavor.

Thank you very much, and I will be pleased to answer any questions you may have.

The Council for Chemical Research is a scientific and educational association dedicated to promoting closer research linkages among industry, government, and academia. The Council's members are represented by department heads from 157 leading U.S. universities, and vice presidents and directors of research from 36 major industrial firms and nine government laboratories. Chemical R&D expenditures accounted for by CCR members amount to $7 billion annually, approximately 75% of the comparable U.S. total.

THURSDAY, FEBRUARY 29, 1996.

DOE AND NRC BUDGETS

WITNESS

ROBERT ATCHER, PH.D., CARDIOLOGY DIVISION, UNIVERSITY OF ALABAMA AT BIRMINGHAM MEDICAL CENTER

Mr. KNOLLENBERG. Next, Dr. Robert Atcher who is with the Cardiology Division of the University of Alabama, or Birmingham, Alabama Medical Center most specifically.

Dr. Archer, you are recognized for 5 minutes, and all of your material will be included in the record.

Mr. ATCHER. Thank you, Mr. Chairman.

Mr. Chairman, Members, thank you for giving me the opportunity to testify on behalf of the American College of Nuclear Physicians and the Society of Nuclear Medicine. Together the two organizations represent over 14,000 nuclear medicine physicians, technologists, scientists and pharmacists.

My name is Robert Atcher and I am on the faculty at the University of Alabama at Birmingham, working on applications of radioisotopes to medicine.

I want to reiterate themes that I have presented to this committee in the past 2 years on behalf of the college and the society concerning the Federal Government's activities related to nuclear medicine. I would also like to take this opportunity to thank Chairman Myers and the Members of the committee for their continued support of programs that have assisted in the development of valuable radio pharmaceuticals for use in nuclear medicine. This work has both addressed the future needs of nuclear medicine and has helped maintain the success of this field in a time of crisis.

Nuclear medicine faces three major problems that are under the purview of this committee. First, the need for the Nuclear Regulatory Commission to withdraw from the regulation of medical activities.

Second, the need for enhanced support for research in this field.

And third, the critical problem of the supply of radioisotopes and enriched stable isotopes for clinical practice and continued research. All of these problems are critical to the current and future practice of nuclear medicine.

The college and the society endorse the conclusions of the recently completed National Academy of Sciences study of the Nuclear Regulatory Commission activities in medicine. In particular, we would like to point out that the national academy study was clear in its recommendations to Congress. The report recommended that Congress eliminate all aspects of the NRC's Medical Use Program, 10 CFR 35, and those regulatory activities conducted under 10 CFR, part 20, that are applicable to medical uses.

We strongly urge the committee to include report language emphasizing the importance of the NRC implementing the study recommendations. The college and the society are concerned that the NRC may take an extended period of time to examine and critique the recommendations, rather than implementing a process that would adopt the recommendations. The NRC's advisory committee on the medical use of isotopes has agreed with the study recommendations that the NRC withdraw from regulating nuclear medicine.

The second issue of concern to us revolves around the future of our discipline. Support for research in nuclear medicine will ensure that exciting new developments in this area will continue to be exploited. Molecular biology has provided us with new tools that can best be exploited by nuclear medicine imaging and ultimately be harnessed in radioisotope therapy. But we must protect and enhance research support to maintain nuclear medicine's capabilities in this exciting marriage of biology, chemistry and physics.

For example, colleagues of mine and I are working on new approaches to the treatment of cancer using new compounds developed with our colleagues in molecular biology. Specifically, we are developing treatments of prostate cancer, breast cancer and ovarian cancer using unique molecules to target radionuclides to the cancer cells. In light of advances such as these, we have made specific recommendations for funding in our written testimony.

I want to thank the Members for their continued support of the establishment of the National Biomedical Tracer Facility. The Institute of Medicine endorsed the creation of this facility in its report on the availability of isotopes, which was published in 1994.

As you know, DOE did not move to the next phase of activity in the development of the NBTF in fiscal year 1995 despite your appropriation. In fiscal year 1996, you once again recognized a demonstrated national need and appropriated funds for the NBTF.

In addition, you recognized our concern that these funds detracted from the research budget and moved that appropriation to the isotope production distribution budget, the correct place for this activity. Yet DOE has again suggested that they won't do anything in fiscal year 1996 in spite of your recognition of the importance of this facility as an isotope producer.

The NBTF will be a center for research and development, education and training, technology transfer, and lastly, the productions of isotopes. These are all important missions of the DOE and this facility should be built to enhance those missions. The impact of this facility on research and nuclear medicine and health care in this country will be immediate as soon as it opens.

As we requested, the Congress has basically repealed Public Law 101.101, thus moving isotope production back into the annual budget. Those who work in nuclear medicine owe a hearty thank you to this committee for spearheading that move. Holding the research community hostage by making isotope production prohibitively expensive was counterproductive to the expressed aims of this committee.

The DOE now has the resources to develop their production facilities and improve the production processes. The Institute of Medicine made many recommendations regarding the production of stable enriched isotopes and radioactive isotopes. Today, the Department of Energy has ignored most of those recommendations. But the one recommendation that would solve many of these problems would be the immediate installation of an advisory panel for the Isotope Production Program.

I would urge the committee to adopt report language encouraging the immediate placement of a Federal advisory committee composed of members from academia and industry in this area, as well as reaffirming its commitment to protect the funds for nuclear medicine research from those projects under the Isotope Production Program.

The college and the society maintain that the benefits of this committee's attention to this research investment will be immediate and tangible to the general public for many years to come, if that support is provided.

Thank you.

Mr. KNOLLENBERG. Thank you.

Let me apologize. I think I introduced you as Dr. Archer.

Mr. ATCHER. Yes. It is a common problem.

Mr. KNOLLENBERG. In my case, the common problem is I don't read as well without my glasses, I guess. But I apologize, and your testimony obviously will be included in the record.

Thank you very much.

[The statement of Mr. Atcher follows:]

ACNP/SNM

American College of Nuclear Physicians/Society of Nuclear Medicine
GOVERNMENT RELATIONS OFFICE

Testimony before the
United States House of Representatives
Energy and Water Appropriations Subcommittee
House Appropriations Committee

February 29, 1996

Presented by
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U.S. House of Representatives
Energy and Water Appropriations Subcommittee, Committee on Appropriations
February 29, 1996

Mr. Chairman, Representative Bevill, and members of the subcommittee, thank you for giving me the opportunity to testify on behalf of the American College of Nuclear Physicians (ACNP) and the Society of Nuclear Medicine (SNM). Together the two organizations represent over 14,000 nuclear medicine physicians, technologists, scientists, and pharmacists. My name is Robert Atcher and I am on the faculty at the University of Alabama at Birmingham working on applications of radioisotopes to medicine.

I want to reiterate themes that I have presented to this committee in the past two years on behalf of the College and Society concerning the federal government's activities related to nuclear medicine. I would also like to take this opportunity to thank Chairman Myers and Representative Bevill for their continued support of programs that assisted in the development of valuable radiopharmaceuticals for use in nuclear medicine. This work, has both addressed the future needs of nuclear medicine, and has helped maintain the success of this field in a time of crisis.

Nuclear medicine faces three major problems that are under the purview of this committee. First, the need for the Nuclear Regulatory Commission (NRC) to withdraw from the regulation of medical activities. Second, the need for enhanced support for research in this field. And third, the critical problem of the supply of radioisotopes and enriched stable isotopes for clinical practice and continued research. All of these problems are critical to the current and future practice of nuclear medicine.

Nuclear Regulatory Commission

The fact that we are regulated by many different organizations is a particularly difficult one. The NRC commissioned the National Academy of Sciences - Institute of Medicine (NAS-IOM) to review the situation. They recently released their report, recommending that Congress transfer to the states the NRC's statutory authority for medical and biomedical clinical and research use of reactor generated radioactive material.

The College and the Society endorse the conclusions of the study. In particuiar, we would like to point out that the NAS-IOM was clear in its recommendations to Congress. The report recommended that Congress eliminate all aspects of the NRC's Medical Use Program, 10 CFR 35, and those regulatory activities conducted under 10 CFR Part 20 that are applicable to medical uses.

The regulation of nuclear medicine would then fall to the states, consistent with that of other forms of ionizing radiation such as X-ray and Computed Tomography. ACNP and SNM believe that the NAS-IOM presented the best alternative when recommending state regulation of nuclear medicine. The transfer of NRC's regulatory authority to the states will allow equal or greater access to quality care for our patients, while maintaining public safety at a substantially lower cost.

We strongly urge the committee to include report language emphasizing the importance of the NRC implementing the NAS-IOM recommendations. The ACNP and SNM are concerned that the NRC may take an extended period of time to examine and critique the recommendations rather than implementing a process that would adopt the recommendations. The NRC's Advisory Committee on the Medical Uses of Isotopes (ACMUI) agreed with the NAS-IOM recommendations that the NRC withdraw from regulating nuclear medicine.

Based on previous report language included by this committee on unnecessary regulation and costs at NRC, I think you will agree that double and triple regulation of the use of radiation in medicine on a state and federal level has to be stopped. It is clear that the safety of the patients will not be compromised; only the cost of their care will be reduced.

Nuclear Medicine Research - Department of Energy

The second issue of concern to us revolves around the future of our discipline. Support for research in nuclear medicine will insure that the exciting new developments in this area will continue to be exploited. Molecular biology has provided us with new tools that can best be exploited by nuclear medicine imaging and ultimately be harnessed in radioisotope therapy. But we must protect and enhance research support to maintain nuclear medicine's capabilities in this exciting marriage of biology, chemistry, and physics.

It is of the utmost importance to realize that the tremendous strides that we have made in medicine today have been guided by improvements in imaging science. Many of those are rooted in the research that has been supported by the Department of Energy (DOE) and its predecessor agencies. In addition, we have been exploiting developments in immunology and molecular biology to better target radionuclides to sites of disease in order to improve diagnostic techniques and, where appropriate, treat diseases. It appears that we are seeing some of the promise of monoclonal antibodies against cancer finally realized, and other similar approaches are being developed every day.

In light of all of the valuable assets coming from the DOE's medical applications program we recommend to the committee that the following funding levels be adopted. Radioisotope Development - $3.5 million (increased from $2.7 million in FY 1996); Radiopharmaceuticals - $12 million (increased from $10.3 million in FY 1996); Molecular Nuclear Medicine - $6.5 million (increased from $5.3 million in FY 1996); and Clinical Feasibility - $2.2 million (increased from $1.8 million in FY 1996).

Isotope Production - Department of Energy

I want to thank the members of this subcommittee for their continued support for the establishment of the National Biomedical Tracer Facility (NBTF). The Institute of Medicine endorsed the creation of this facility in its report on the Availability of Isotopes, published in 1994. As you know, DOE did not move to the next phase of activity in the development of the NBTF in FY 1995 despite your appropriation. In FY 1996, you once again recognized a demonstrated national need and appropriated funds for the NBTF. In addition, you recognized our concern that these funds detracted from the research budget and moved that appropriation to the Isotope Production and Distribution budget, the correct place for this activity. Yet, DOE has again suggested that they won't do anything in FY 1996 in spite of your recognition of the importance of this facility as an isotope producer. The NBTF will be a center for research and development, education, training, technology transfer, and, lastly, production of isotopes. These are all important missions of the DOE and this facility should be built to enhance those missions. The impact of this facility on research in nuclear medicine and health care in this country will be immediate as soon as it opens.

I want to remind you that the NBTF will not solve all of our isotope production problems. The daily clinical use of nuclear medicine relies heavily on reactor produced isotopes. The Society and the College have testified previously that the practice of nuclear medicine in this country is contingent upon a reliable source of Molybdenum-99. Some progress has been made in attempting to produce Mo-99 which is used to produce Technetium-99m, the workhorse isotope of nuclear medicine. There are also other isotopes that are not produced in reactors domestically that are essential to the practice of medicine and the conduct of all kinds of medical research. Some of these radionuclides have great potential for the treatment of disease and are in clinical testing.

As we requested, the Congress has basically repealed Public Law 101.101, thus moving isotope production back into the annual budget. Those who work in nuclear medicine owe a hearty thank you to this committee for spearheading that move. Holding the research community hostage by making isotope production prohibitively expensive was counterproductive to the expressed aims of this committee. The DOE now has the resources to develop their production facilities and improve the production processes.

The Institute of Medicine made many recommendations regarding the production of stable enriched isotopes and radioactive isotopes. To date, the Department of Energy has ignored most of those recommendations. But the one recommendation that would solve many of these problems would be the immediate installation of an advisory panel for the Isotope Production program. The advice of those in the field would be invaluable to DOE and would insure that some of the past mistakes of the Isotope Production Program would not be repeated, particularly large capital expenditures at facilities that are not appropriate for isotope production. A panel of representatives from academia and industry would insure that both the commercial and research communities would be served adequately.

The DOE has begun a process to identify those government facilities capable of producing isotopes that have outlived their usefulness to the physics research community and can be reclassified so that industry, in partnership with DOE, can operate reactors, calutrons, and other facilities for isotope production at an incremental cost rather than at full cost recovery. There are numerous models for this elsewhere in the world. This approach to the optimum use of existing government facilities is very important since not only nuclear medicine, but researchers in biology, nutrition, environmental research, chemistry and physics are dependent upon a stable, reliable supply of isotopes for their research.

We urge the committee to adopt report language encouraging the immediate placement of a federal advisory committee in this area as well as reaffirming its commitment to protect the funds for nuclear medicine research from those projects under the isotope production division.

Nuclear medicine developed into a $10 billion dollar a year health service industry from a small research enterprise funded by the DOE and predecessor agencies. This field has been a spectacularly successful example of the beneficial growth of an industry from federally funded research. At present however, the flow of products and techniques into the marketplace and into the clinic is threatened by decreasing support. Success like we have achieved deserves to be recognized and rewarded, not punished by flat or decreasing research budgets. We continue to need increased research budgets and a stable, reliable source of isotopes for both clinical and research uses so that we can provide the best care possible for patients now and in the future.

The College and the Society maintain that the benefits of such research investment will be immediate and tangible to the general public for many years to come if that support is provided. Thank you.

THURSDAY, FEBRUARY 29, 1996.

UNIVERSITY NUCLEAR PROGRAMS AND RESEARCH REACTORS

WITNESS

DAVID WEHE, PH.D., AMERICAN NUCLEAR SOCIETY

Mr. KNOLLENBERG. Dr. David Wehe is here.

So Dr. Wehe, we would like to have you come forward. You are recognized for the customary 5 minutes, and you may begin.

Mr. WEHE. Yes. The American Nuclear Society is a not-for-profit scientific and technical and educational society of nearly 15,000 members, and I am honored today to sit here in this seat and wear their mantle.

Nuclear energy supplies about a fifth of our Nation's energy and it has a very good safety record. But there is more than nuclear, what goes on in the American nuclear side than just the conventional fission. Nuclear technology has an important role in medicine and in general industry, and the previous speaker highlighted the importance of nuclear processes in medicine and the American Nuclear Society supports those.

For example, nuclear technology in the form of radioisotopes is used in over 50,000 therapies, 13 million diagnostic procedures, and close to 100 million laboratory tests every year in the United States; 85 percent of the experiments at the NIH, National Institutes of Health, involve the use of isotopes also. So radiation applications and control industrial processes are important parts of the American Nuclear Society as well.

Now, in the written statement, which I will leave for the record, the American Nuclear Society makes specific recommendations related to fission work and recommendations related to fusion work. I will leave those for you to look at at a later type.

My particular interest here is in the support of nuclear education, research and reactors, and this year, the American Nuclear Society wants to emphasize in its testimony the importance of strengthening America's commitment to nationwide university and postgraduate education programs in the fields of nuclear science and technology. We need to attract these young people and show them a commitment to the nuclear science field.

Equally important is the preservation of a solid foundation of university-based nuclear hardware. Right now we have, this country has 34 university-owned research nuclear reactors.

These are fairly old reactors, many of which have been commissioned since around the post-World War II period, mostly in the late 1950s and 1960s. Of the 76 that were originally commissioned, about 34 remain in operation. That is a tremendous loss, and insufficient funding was a primary cause for most of those closures.

Since about 1978 as well, the number of nuclear engineering departments and programs at American universities has declined by more than half. The number of nuclear students, both graduate and undergraduate, has gone down even more steeply.

What the American Nuclear Society is looking for is support in both—two programs, one is the Nuclear Engineering Education Initiative which supports graduate students and graduate student fellowships, and university research reactor support. In the area of university research reactors, there is a great deal of motivation for supporting these, and one of which, one of the most exciting ones these days, is on neutron capture therapy.

There has been a number of studies done on deep-seated melanomas, skin cancers and brain tumors that have taken up a boronated drug and then irradiated through the use of neutrons, which then destroys the tumor. Again, this is work which is going on, one of many different projects going on at university research reactors, but these reactors need support and attention.

So what we are asking for you to do is to take a look at supporting both nuclear engineering education through fellowships and educational programs, and in the university research reactors as well. As a side note, we took your administrative assistant, Craig Piercy last week through our University of Michigan research reactor and he enjoyed that immensely, and you will notice he is no different than before, so it is quite safe.

Mr. KNOLLENBERG. As you were probably going to follow up with, you are going to invite me there as well, in fact, you have, and I look forward to making that trip.

I should say also that Dr. Wehe hails from the University of Michigan, which is a stone's throw from my area. So again, we appreciate your coming today and your testimony will be included, and we look forward to that trip back to your environment.

Mr. WEHE. Thank you, sir.

Mr. KNOLLENBERG. Thank you.

[The statement of Dr. Wehe follows:]

PREPARED STATEMENT
By the American Nuclear Society

PROPOSALS FOR FY97 BUDGET OF DEPARTMENT OF ENERGY
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
APPROPRIATIONS COMMITTEE
UNITED STATES HOUSE OF REPRESENTATIVES

Presented by
Dr. David Wehe, University of Michigan

February 29, 1996

INTRODUCTION

The American Nuclear Society (ANS) is a not-for-profit scientific, technical, and educational society whose nearly 15,000 members include scientists; engineers; professors, managers and operators of manufacturing facilities, research laboratories, and power plants; planners; designers; regulators; attorneys; and diplomats. ANS has members from about 20 other nations, 60 Local Sections, 55 Student Branches at universities, and 16 Plant Branches at U.S. nuclear power plants.

Nuclear energy currently supplies more than one fifth of our nation's electricity, with a safety record unmatched by any major alternative source. And it does so while being "environmentally correct," emitting no smoke, sulfur dioxide, nitrogen oxides, or greenhouse gases: carbon dioxide or methane. Nuclear technology also has an important role in medicine and general industry. One in three people entering American hospitals is treated with nuclear medicine, either for diagnoses or for therapy. Nuclear technology in the form of radioisotopes is used in over 50,000 therapies, 13,000,000 diagnostic procedures, and close to 100 million laboratory tests every year in the United States. Eighty-five percent of the experiments at the National Institutes of Health involve the use of isotopes. Radiation applications control industrial processes to make them more competitive and energy-efficient, and the use of radiation also makes cutting-edge research on materials and processes possible.

My name is David Wehe. I am Associate Professor of Nuclear Engineering at the University of Michigan, and am pleased to represent the American Nuclear Society here today. I appreciate the opportunity to submit this statement to the Subcommittee. This testimony has been reviewed by the elected officers of the American Nuclear Society on behalf of its membership, in accordance with Society procedures, and has been approved by the elected President of ANS.

PROPOSALS FOR THE DEPARTMENT OF ENERGY'S FY97 BUDGET, AND RELATED ISSUES

President Bill Clinton has repeatedly stated that he backs high technology industries that can compete in international markets, providing good-paying jobs for a well-educated work force. The U.S. nuclear industry fits these criteria far better than most: U.S. technology is still the world's first choice. For example, the Japanese recently constructed an American-designed Advanced Boiling Water Reactor, and have plans for more. Unfortunately, much of the nuclear research program of the Department of Energy (DOE) has been terminated in recent years. By the time the American public realizes the limitations of alternative supply options, it will be difficult to reinvigorate a perhaps dangerously weakened nuclear industry.

The alternative may appear simple: "buy foreign" (which, ironically, could be U.S. technology but designed and fabricated by overseas competition) when the time comes. But nuclear power plants, at $2 or 3 billion apiece, are probably the most expensive single products in international commerce. It makes little sense to buy foreign equipment when we can produce as good or better reactors here at home, using American workers–if we have the nuclear industry in place to do the job.

The Department of Energy has not yet released its draft FY 1997 budget. Therefore ANS is making its own proposals in the nuclear field, given the likely budgetary constraints. ANS looks forward to DOE's maintaining its commitment to the Advanced Light Water Reactor (ALWR) design certification and the First-of-a-Kind Engineering program. We understand that DOE may be requesting close to the $40 million

Congress approved last year. We would like to see the program supported at the level suggested by the Nuclear Energy Institute, $64 million.

Note that, though the ALWR work is sponsored by DOE, it is cost-shared by industry. Thus it does not fit the definition of "corporate welfare." Beyond that, if a reactor is sold, in the U S. or overseas, there is a payback provision in contracts with DOE, so that the Government gets reimbursed.

The Federal Government has made the decision to close out work on the Gas Turbine Modular Helium Reactor (GT-MHR). ANS recommends that this decision be revisited. For this reason and because of the cost of the program, ANS feels strongly that the program be closed out responsibly and that its results be thoroughly documented and safely secured.

ANS supports the continuation of research and development in the field of electrometallurgical treatment of spent nuclear fuel. This promising technology shows great potential for application in the disposition of DOE-owned spent fuel now in storage in DOE facilities around the country. For one thing, it could result in a substantial reduction in packaged waste volume for ultimate disposal. The National Academy of Sciences says that electrometallurgical treatment warrants continued R&D. DOE supported development at $25 million in FY96. ANS recommends that this program be given a high priority in the FY97 appropriations process.

DOE is trying to deal with one of the most important concerns in the medical and industrial area, continued availability of radioisotopes. DOE's policy is to privatize U.S. production of isotopes: at present the United States produces almost none of the isotopes used in large numbers here. The United States requires a solid, independent, domestic source of isotopes. ANS commends DOE for its efforts. It appears that further work has to be done to make DOE's policy fully practical, in terms of implementing it in cooperation with private business. ANS wishes to assist DOE in this regard.

ANS is concerned about the confusion surrounding DOE's work on the suitability of the Yucca Mountain site for high-level waste disposal and the possibility of construction of an interim storage facility. If DOE does not discharge its legal responsibility to begin accepting spent nuclear fuel and high-level waste by 1998, many utilities will face difficult choices ranging all the way to closure of their nuclear power plants, at great cost to both rate-payers and investors. And this would be after collecting more than $11 billion from electricity rate-payers and placing this money into a fund which was supposed to be used to provide those waste facilities. ANS believes strong support should be given to the construction of an interim storage facility to make possible DOE's accepting spent fuel by 1998.

And we are very distressed that in mid-February 1996 the Administration once again stalled the California low level waste (LLW) disposal facility at Ward Valley in the name, it says, of further study. This is in spite of the fact that the facility has been fully approved by the state government, and, more recently, by the National Academy of Sciences, which reviewed the issue at the express request of the Administration itself. This is an especially grave issue because California is a bellwether state. With large amounts of groundbreaking medical and biological research, billions of dollars, and eventually the lives of cancer patients possibly at stake, such delay is simply unconscionable. The White House should order Secretary of the Interior Bruce Babbitt to transfer Federal land to the LLW project forthwith. If that does not occur, we hope that Congress will be able to legislate a solution to this ever more intractable solution.

It is also becoming more evident that standards and criteria currently being applied to DOE facility cleanup efforts will force the expenditure of funds far in excess of what will ultimately make sense. The time is surely at hand for setting reasonable standards that balance calculated risks of action against the risks of delaying, and perhaps even failing to proceed altogether, with the necessary clean-up projects.

ANS continues to object to the full-fee recovery policy imposed on the U.S. Nuclear Regulatory Commission. The NRC is the only agency of which we are aware that has to pay for all of its operations out of the licenses it grants to the enterprises it regulates. This includes such areas unrelated to U.S. commercial nuclear power generation as the safety of reactors in the former Soviet Union.

FUSION

Nuclear fusion represents an important future energy resource which, like current nuclear fission plants, does not contribute to acid rain or global warming problems, and its deuterium fuel is plentiful and can be readily obtained from sea water. In FY95 nuclear fusion received $370 million. In the summer of 1995 the

President's Committee of Advisors on Science and Technology (PCAST) recommended a figure of $320 million as a minimum annual funding level. Instead, in FY96 fusion was cut to only $244 million, a reduction of a full 32 percent compared to the previous year.

DOE's Fusion Energy Advisory Committee (FEAC) feels that this very large cut will cost the United States its leadership role in fusion energy research. Nonetheless, FEAC foresees a useful U.S. program, with emphasis on the science and technology goals underlying fusion energy engineering, and including participation in the International Thermonuclear Experimental Reactor (ITER). FEAC has prepared a plan for living with a future funding level set at $275 million. We recommend that FEAC's constant level-effort budget of $275 million be maintained and perhaps improved.

UNIVERSITY NUCLEAR EDUCATION, RESEARCH, AND REACTORS

This year the American Nuclear Society wishes to put particular emphasis in its testimony on the importance of strengthening America's commitment to a dynamic nation-wide university and post-graduate education program in the field of nuclear science and technology. ANS, as the association of nuclear professionals, has as its special concern the continued vitality of nuclear education and science on university campuses, to make sure that the technology is, in a literal sense, maintained by a stream of motivated young people entering its ranks on a regular basis. Equally important is the preservation of a solid foundation of university-based nuclear hardware, in the form of the 34 university-owned research nuclear reactors. This equipment is used in such vital areas as medical research, archeology, and advanced materials research and development, as well as in nuclear physics and engineering as such.

We would like at this point to make a point of clarification. The mission of university research reactors (URRs) and nuclear engineering education are frequently confused, as is their relationship to the commercial nuclear power industry. Nuclear engineering education (NEE) involves the study of radiation science, including the operation of nuclear reactors. However, nuclear engineering is only one of the numerous disciplines using URR facilities. While the commercial power industry employs many nuclear engineers, many other graduates find employment in non-energy sectors.

Shrinking budgets for research in nuclear engineering jeopardize both the future availability of well-trained nuclear specialists and the "hardware" base of such programs, the university research reactors, as faculty are forced to move away from conventional fission reactor engineering and students no longer enter the field. Seventy-six university research reactors were commissioned in the post-World War II period, mostly in the late 1950s and early 1960s. Only about 34 are still in operation; insufficient funding was a primary cause for the over 40 permanent closures. Since 1978 the number of nuclear engineering departments and programs at American universities has declined by more than half. The number of nuclear students, both graduate and undergraduate, has gone down even more steeply.

University research reactors in the United States form a fundamental and vital component in a broad spectrum of our national research and education infrastructure. The are a source of neutrons for multidisciplinary research efforts resulting in contributions to the fields of physics, chemistry, biology, medicine, epidemiology, archeology, environmental sciences and waste remediation, material sciences, fluid mechanics, geology, energy production, and even the regulation of the nuclear industry itself.

In education, university research reactors are used for laboratory instruction in all these fields, with emphasis on radiation measurement, reactor science and engineering, and applications of radiological techniques. Many of the reactors serve as centers for precollege education programs offered for high school students and teachers who come to the reactor for instructional programs and research. URRs also form the basis for education of future scientists and engineers in the above mentioned broad range of disciplines that use reactor-based techniques to solve unique problems.

Compared to national user facilities at national laboratories, university-based reactors often provide a superior environment for graduate research because of less rigid facility scheduling, enhanced flexibility, lower operating costs, and available local supporting capabilities. Not only are they a rich resource for radiation sciences research, but they also can serve as development bases for advanced instrumentation to be used at national centers.

University research reactors are used for environmental studies in such areas as acid rain and pollution dispersion. They are used to support verification of the nuclear test ban treaty. Remote radiation monitoring instrumentation able to sense clandestine weapons testing (components of a global atmospheric radionuclide system) is being developed and tested at a URR facility.

University research reactors are used in a wide variety of medical research. Many URRs contribute to medicine through basic research in the life sciences, such as identifying molecular structures and interactions. They also produce and investigate applications of radioisotopes. For instance, the direct neutron irradiation of deep-seated melanoma (skin cancer) and brain tumors that have taken up a boronated drug is being investigated through use of URRs at a number of universities. This treatment is termed Boron Neutron Capture Therapy (BNCT). Studies have suggested that BNCT may be effective in combating these diseases. In contrast, these diseases are invariably fatal when treated with conventional therapies.

But nuclear facilities are expensive to maintain. Host institutions bear a disproportionate share of URR operating expenses. Sharing of costs for such major research facilities by Federal agencies demonstrates to university administrators their significance and value, and helps prevent further reactor and program closures. The National Academy of Sciences recommends Federal support to maintain, refurbish, modernize, and upgrade existing URRs, a much less costly alternative than replacing them.

Without significant university research reactor support, the United States will continue to fall behind its international competitors in technological advances. The number of papers presented at a mid-decade International Conference on Neutron Scattering, a frontier of nuclear science research with widespread applications in fields as diverse as health science and advanced materials, is indicative of the loss of U.S. leadership:

Origin of Papers	Percent
England	21
France	20
Germany	14
Japan	10
United States	4
Others	31

THE NEED

Why is Federal support needed? Investments must be made to modernize these facilities, which are up to forty years old, including equipment replacement, new equipment purchases, and major preventive maintenance. Modern equipment such as multi-channel analyzers must be purchased, and major new research capabilities such as neutron scattering facilities must be added, to match the capabilities of other research reactors throughout the world. In some cases major life extension projects such as lining concrete pools or replacing embedded piping are necessary.

What are the numbers? From FY 90 through FY93 the Department of Energy provided funding in the amount of $10.1 million for university research reactors, URR (hardware), and nuclear engineering education, NEE ("software," in the sense that it was spent on people). Over the four years the $10.1 was split, on the average, almost precisely 50:50 between URR support, including reactor fuel, reactor sharing, and instrumentation, and NEE activities, research, fellowships, and DOE funds designed to match grants by utilities.

In FY94 and FY95, total funding was cut over fifty percent to $4.2 million, with well over half of what was left going for the most fundamental aspect of URRs, reactor fuel. Research grants for graduate students were eliminated all together. For FY96, in an attempt to restore programs supported in previous years, the Administration asked for $6.1. The amount received was actually only $3.5, and the fellowship program was left unfunded. This $3.5 was 16 percent less than in the previous year and only about one third of the $10.1 of the decade's earlier years, without even taking account of inflation.

For FY97 the university nuclear community is asking to restore programs at the same level as they were funded earlier in this decade. Funding would be broken down into $6.8 million for nuclear engineering education and $5.4 million for university research reactors. A priority of the $6.8 million for NEE would be the reinstatement of the research grant program at $5 million and the fellowship program at $1 million.

The $12.2 million figure seems quite reasonable, considering that it funds programs that cost $10.1 million in FY90.

Representatives from academia testified this morning, introducing an approach to preserve the hardware needed for nuclear science research in this country. With such developments as the cancellation of the Advanced Neutron Source coincident with a growing need for radiation science research, university reactor research programs take on a new significance. The university people are exploring the possibility of establishing five to seven "centers of excellence," university reactor programs which would be chosen on the basis of professional peer review. To illustrate a DOE budget including such centers:

1. The centers of excellence would require $10 million in operating costs from DOE per year.

2. The centers would also need capital investment at the rate of $5 million per year for five years.

The total for FY97 would be $15 million for the centers of excellence. The concept would take advantage of the relatively low cost of operating university reactors, as acknowledged in a statement by Secretary O'Leary:

> *Total operating costs of all university reactors are equivalent to the cost of operating one Department of Energy research reactor. It is cost-effective to maintain and upgrade existing facilities when maintenance and upgrades are done in a cooperative way with the universities.*
>
> ("Report to the Congress on the Condition and Status of University Research and Training Reactors," U.S. Department of Energy, May 19, 1994, underlining in the original)

CONCLUSION

ANS must express its concern with the overall direction that funding for nuclear projects has taken over the past several years. This is especially the case when just one technology, nuclear, can be used for so many different purposes to improve the human condition. As we noted earlier, nuclear is environmentally benign, emitting no greenhouse gases or air pollutants. And nuclear is essential in such areas of great importance to humankind as medicine, energy, and, through irradiation, food safety.

We thus appreciate the Government's continued support of university nuclear programs, even on an attenuated level. Congress and the Administration both are showing varying degrees of support for a solution to the high-level waste situation. It would be very beneficial if together the two branches can do the same in regard to the Ward Valley, California, low-level waste facility. But this can only be a beginning in the necessary effort to preserve and strengthen a technology which has so much to offer the world.

Thank you, Mr. Chairman.

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THURSDAY, FEBRUARY 29, 1996.

PROTON THERAPY

WITNESS

DONALD P. SMITH, CHAIRMAN & CEO, PROTON THERAPY CORPORATION OF AMERICA, INC.

Mr. KNOLLENBERG. We have one more individual that would like to testify and we would like to hear from him.

Mr. Donald Smith, Chairman and CEO of the Proton Therapy Corporation of America; he will probably talk a little on Proton therapy, I believe.

So, Mr. Smith, you are recognized for 5 minutes, and all of your material will be included in the record.

Mr. SMITH. Thank you very much, Mr. Chairman.

In the interest of brevity, I will summarize my statement and talk very briefly about my statement.

You have heard a lot about research and demonstration projects that are going on. I would like to discuss very briefly the result of one of the demonstration projects that this subcommittee supported a number of years ago which is the Proton Therapy Treatment Center at Loma Linda University. That has been a tremendous success, not only in its actual treatment of patients, but it has in fact done what a demonstration project should do, and that is it has created an industry around which additional proton therapy treatment centers will be established throughout the country. We are in the process of doing that right now.

The three points I would like to make in summarizing, the subcommittee has played a major role in proton therapy by supporting the Loma Linda Project. The second is that this demonstration project has created a viable industry, both in the manufacture of proton therapy and in the use of it to treat patients.

Third, the subcommittee, in terms of a recommendation, should continue to support this type of new technology, and look for public/private demonstration projects that can create industries and create new opportunities. Proton therapy is unique in medical technology, and the previous two spokespersons talked about the program within which this has been done, this research has been done, that is the nuclear medicine program.

Proton therapy is a little bit unique, in that it is the scale of proton therapy equipment is such that it has required some Federal investment in order to get it to the commercial stage. It has been around for about 50 years and has treated 15,000 patients. It has been approved for patient use by the Food and Drug Administration.

Medicare reimburses payments for proton treatment. The difficulty, however, is that it requires very large and sophisticated equipment. The machine itself weighs 500 tons. It involves a building that is 175 feet long and 75 feet wide. It costs $65 million to build one of these centers. No individual hospital was willing to risk that kind of investment without some support from the Federal Government.

There is the first project supported at Loma Linda by this subcommittee which has been tremendously successful. There is the second project at Harvard University which was supported by the subcommittee down the hall, the Labor-HHS subcommittee using two different technologies. The result of these two projects has been the establishment of an industry, and my company, the Proton Therapy Corporation, is one of the companies that is promoting and developing the establishment of proton therapy treatment centers.

We plan over the next 8 years to build 10 cancer treatment centers with a capability to treat 20,000 patients a year. If you ever have a question in the subcommittee about the value of demonstration projects, this is one of the true success stories of what this subcommittee has done. There is no question about it, that the industry itself has been a direct result of the demonstration projects supported here.

I would like to make a couple of recommendations summarized on the last page of my testimony in order to continue support for the Nuclear Medicine Research Program. The results are very demonstrable and very effective.

You should continue to support, where appropriate, demonstration projects of all types where there is a direct commercialization, privatization opportunity.

Finally, you should assure that technology is available through competitive means, either through patent use or nonuse, and through assurances that the competitive process is in place.

In the interest of the hour, I will summarize with that.

If there are any questions, I would be glad to answer them.

[The statement of Mr. Smith follows:]

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Statement of Donald P. Smith
Chairman and Chief Executive Officer
Proton Therapy Corporation of America, Inc.
to the
Subcommittee on Energy and Water Development
Committee on Appropriations
United States House of Representatives
February 29, 1996

Mr. Chairman, Mr. Bevill, members of the Subcommittee, my name is Donald P. Smith and I am Chairman and Chief Executive Officer of the Proton Therapy Corporation of America, Inc. (PTCA). Thank you for the opportunity to appear before the Subcommittee today.

I am here to update the Subcommittee on progress made in proton therapy in recent years since you provided support for a demonstration proton therapy center in California. I also want to encourage you to continue to support demonstration projects of the type you supported in proton therapy. Proton therapy is a form of radiation used in the treatment of malignant and non-malignant tumors. Conventional radiation therapy uses the particle of the atom called the electron, proton therapy uses the proton. The proton is 1,835 times denser than the electron and can therefore be delivered into a tumor with much greater accuracy with little or no side effects. The use of protons for cancer treatment was originally proposed by Robert Wilson, Nobel Prize-winning first director of Fermi National Laboratory. It was first used experimentally for patient treatment in 1956. Since then, more than 15,000 patients have been treated with protons throughout the world at sixteen locations, primarily large national laboratories. The results of these treatments have demonstrated significant advantages for proton therapy. This is because protons can be delivered with greater precision and can deliver larger doses of radiation with virtually no adverse side effects.

Proton therapy has evolved from the experimental stage in the 1960's through patient treatment into the 1980's. The clinical demonstration project supported by this Subcommittee at Loma Linda University Medical Center in the early 1990's uses a synchrotron accelerator fabricated at Fermi National Laboratory and installed by SAIC. Further development is currently underway at Massachusetts General Hospital in conjunction with the Harvard Cyclotron Laboratory using a commercially developed cyclotron accelerator manufactured by Ion Beam Applications, a Belgian company, the world leader in cyclotron science and technology, with the clinical components -- the gantries and health system -- developed by General Atomic of San Diego, California. This project received federal support from the National Cancer Institute through the Labor-HHS Appropriations Subcommittee.

These two federally-supported projects were critical to making proton therapy viable today. They have also encouraged two additional facilities at Indiana University and the University of California/Davis. These four centers are developing medical treatment expertise, including experience in a hospital environment at Loma Linda, where they are developing the protocols, treatment methodologies and procedures that will allow proton therapy to become widely available. Much of the basic research and the treatment systems were invented and pioneered at the Harvard Cyclotron Laboratory. Harvard and Massachusetts General working with Fermi Laboratory, Berkeley and other national and university laboratories, created the intellectual, scientific, and medical framework for proton therapy equipment in the world.

The research and prototype demonstration projects supported by the Federal government have had very pronounced success. Harvard has treated more than 6,000 patients in its existing cyclotron facility and its new center will greatly enhance its research and clinical capabilities. Loma Linda has demonstrated that proton therapy can be effectively used to treat patients in a hospital environment. These two projects have received Medicare-Medicaid reimbursement approval and 175 other third party insurers pay for proton therapy on a routine basis. This confirms its non-experimental status. The Food and Drug Administration (FDA) has approved the use of protons for patient treatment and has approved the manufacture and use of proton therapy equipment. Finally, these two federally supported demonstration projects, using different technical approaches to the production of protons, one a synchrotron, one a cyclotron, have created a commercial manufacturing base that makes proton therapy available.

The availability of the technology alone however does not mean that proton therapy will become generally available to the public and accepted by the medical community. Proton therapy requires the largest, most sophisticated medical equipment in the world and a substantial capital investment. Until recently there has been no infrastructure in existence to support the expansion of proton therapy to the 320,000 annual estimated new cases of tumor cancer in the United States that could be effectively treated with protons.

This is the point at which the transition from these experimental and demonstration projects takes place. The technology has been proven and commercial development can begin. The Proton Therapy Corporation of America is a company that is picking up the development of proton therapy where the demonstration projects end. There are several roles we will assume in doing this. Our first role has been to create a national strategic plan to build ten regional proton therapy treatment centers in the United States in the next eight years. Working in conjunction with the team currently building the Harvard/Massachusetts General project, the Proton Therapy Consortium is made up of Ion Beam Applications, General Atomic, Bechtel and Tsoi/Kobus and Associates, we have established a prototype treatment facility design that standardizes the equipment and provides for uniform treatment methods. It also provides the basis for accurate capital and operating cost estimates.

Our second role has been the development of a national network of prestigious, highly - regarded academic and regional medical centers to operate the proton therapy treatment centers. This national alliance includes institutions in New York, Pennsylvania, Maryland, South Carolina, Michigan, Missouri, Minnesota, Washington, and northern California. Two additional facilities in Florida and Texas are also well along in the planning stages. These proton therapy centers will ultimately treat more than 20,000 cancer victims annually. Treatment will be effective and with virtually no side effects. These regional centers will be accessible to everybody in the United States and will be electronically linked to share treatment expertise and diagnosis assistance.

Finally, PCTA's role includes the development of an economic model and a financing mechanism that relies on private sector investment with no public funding requirement to make proton therapy a reality. The economic model and private financing allow us to select the most appropriate locations with the best medical partners available, so that proton therapy is driven by market factors, patient needs and the excellence of our alliance rather than other external factors.

Because of the limitations on federal research funding, PTCA is assuming part of this responsibility by establishing an independent, non-profit Proton Therapy Research Foundation. This Foundation will support proton therapy research in clinical, medical, technology and other areas. It will maintain the database of information from every patient treated at the treatment facilities in our alliance. This will eventually become the largest uniformly maintained database of clinical treatment experience available for cancer research in the world and will be publicly available through the Foundation.

Mr. Chairman, I want to conclude today by applauding this Committee and its support of nuclear medicine research, proton therapy development and the demonstration projects that have established the framework upon which the proton therapy industry is based. Without this support there would be no possibility that proton therapy would ever become publicly available. I would also like to conclude with three recommendations for the consideration of the Subcommittee.

First, continue to support proton therapy and nuclear medicine research activities of the Department of Energy. The talent, resources and facilities of the Department are well-suited to this research and the results of it, ranging from imaging and diagnostic technologies all the way to proton therapy and boron-neutron capture therapy will contribute to finding a cure for cancer.

Second, continue to support cost-shared demonstration projects where there is genuine opportunity for privatization and commercialization of technology. The effort by the Department of Energy and other federal agencies to establish industry partnerships should be supported and expanded. There will be failures in these partnerships, but there will be important successes, and these warrant support.

Third and finally, in supporting the development of new technologies, you should ensure, through competitive means, that technologies developed are available to all, ensuring that Federally financed projects truly become the demonstrations they are intended to be and do not serve only limited purposes or financial interests of a single institution.

Thank you Mr. Chairman and members of the Subcommittee, for the opportunity to appear here today. What you have done in the area of proton therapy will ultimately affect tens of thousands of people and will save thousands of lives. You should be justly proud of this.

* * * * *

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Donald P. Smith
Chairman & Chief Executive Officer

Donald Smith is the founder of the Proton Therapy Corporation of America, Inc. He has enjoyed a twenty-five year career in the public and private sectors, specializing in financial management, healthcare and high technology development. He has worked with numerous health care providers, hospitals, medical centers and institutions of higher education, as well as with Fortune 100 corporations and other high-technology companies involved in health care technology development.

As the principal architect of the strategic plan to introduce proton therapy into mainstream medicine in the Untied States, Mr. Smith has been instrumental in bringing together the Proton Therapy Consortium, the group of companies that will manufacture, construct and commission the national network of proton therapy treatment centers. He has been involved in the financing, planning and inauguration of the first clinical proton therapy treatment in this country and has worked with international corporations and organizations in developing market opportunities for proton therapy.

Mr. Smith's career includes seventeen years in the Executive and Legislative Branches of the Federal government where he began his career as a Presidential Management Intern in the U.S. Department of Commerce in 1970. At the Cost of Living Council from 1971 to 1973, Mr. Smith served as Acting Executive Secretary of the Council. In the Office of Management and Budget (OMB) he was awarded the OMB Professional Achievement Award. As a Professional staff members of the House Appropriations committee from 1975 to 1987, Mr. Smith was responsible for Defense, Energy and science research and development programs.

Mr. Smith is founding Director of the National Association for Proton Therapy, a healthcare trade association promoting proton cancer therapy and providing public relations support to this emerging industry He has also established a highly successful Washington-based healthcare and public affairs consulting company, The Franklin Group.

Don Smith has been recognized by the Challenger Center for Space Science Education with its annual achievement award and by the Governors of the Appalachian Region with their Silver Medal for contributions to the people of Appalachia.

Mr. Smith has a BA degree form the University of Texas at Austin and a Masters degree in Public Administration from the University of Virginia. He lives in Annandale, Virginia, is married with two grown daughters.

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Ronald J. Anderson
President

Ronald J. Anderson has enjoyed a 22 year career in hospital and university administration. Prior to joining the Proton Therapy Corporation of America, Mr. Anderson served as the Senior Vice President for Operations and Chief Financial Officer at Loma Linda University Medical Center. In this capacity he oversaw the day to day operations and finances of a $400,000,000 a year institution with over 4,000 employees.

During his tenure Mr. Anderson was involved in leading many strategic initiatives and innovative projects, the most significant of which included:

> Assisting in overseeing the development of the world's first hospital based proton therapy cancer treatment center. Mr. Anderson's involvement included working with the Congress and the Department of Energy in obtaining a $20,000,000 grant, securing FDA approval for use of the facility and obtaining approval from the Medicare program, numerous insurance and health maintenance organizations for third-party payments.
>
> Establishing a new not-for-profit foundation for the acquisition and financing of a 100 person medical group and 220 bed hospital that was exclusively involved in capitated managed care. Mr. Anderson negotiated with the Internal Revenue Service to secure a precedent making ruling which granted non-profit status for the foundation and authorized the issuance of tax exempt debt.
>
> Providing consultative advice in developing and constructing a 400 bed hospital in mainland China. Mr. Anderson made numerous trips to China to meet with government officials and also led discussions to obtain financing from a Hong Kong industrialist. In addition, Mr. Anderson worked with the U.S. Agency for International Development in obtaining a grant of $2,000,000 to assist in the purchase of equipment for this hospital.

Mr. Anderson also serves as a Senior Consultant to the Franklin Group, a Washington D.C. based firm which specializes in government relations, public affairs, and strategic planning.

Mr. Anderson has served as an Assistant Dean for the School of Medicine and Assistant Professor of Health Care Administration at Loma Linda University. Mr. Anderson received his MA from the University of Redlands and a BS from Loma Linda University.

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James G. Schwade, MD, FACR
Senior Vice President
Medicine & Science

James G. Schwade, M.D. is an internationally known radiation oncologist, currently the Director of Radiation Oncology at the Gamma Knife Unit at the Miami Neuroscience Center, Doctors Hospital, Coral Gables, Florida. Previously, Dr. Schwade was Professor and Chairman of the Department of Radiation Oncology at the University of Miami School of Medicine, where he is now Clinical Professor of Radiation Oncology.

Dr. Schwade has extensive experience with the design, construction and operation of major radiation therapy facilities. He participated in the design of radiation therapy facilities at the National Cancer Institute, Baptist Hospital of Miami, Jackson Memorial Hospital and the Sylvester Cancer Center, and either assisted or supervised the organization and function of those departments.

While on the staff of the National Cancer Institute, Dr. Schwade was Special Assistant for Radiation Oncology in the Cancer Therapy Evaluation Program, which oversees NCI-sponsored clinical trials. He also participate in the organization of and supervised the NCI's initial efforts in radiosensitizer and radioprotector drug development. Dr. Schwade headed the Radiobiology Section in the Radiation Oncology Branch and has been Principal Investigator in the Radiation Therapy Oncology Group (RTOG) and in the NCI 3-D Conformal Radiotherapy Group.

Dr. Schwade has pioneered techniques for fractionated radiosurgery of brain tumors in addition to his extensive clinical experience in Gamma Knife Radiosurgery. He has lectured extensively on radiosurgery and radiation oncology and has authored over 80 scientific publications.

Active in national and state radiology and radiation oncology organizations, Dr. Schwade was also Chairman of the National Association for Proton Therapy in 1993-1994. He was formerly Chairman of the Florida Radiological Society for Radiation Oncology and is a Councilor to the American College of Radiology for the Florida Radiological Society. Since 1993, Dr. Schwade has served as the Chairman of the Board of Managers of Quality Oncology, L.C., a multi-state cancer delivery system which he founded and organized. He is a Fellow of the American College of Radiology.

Dr. Schwade is 49 years old and married to Karyn Karl Schwade. They live in Coconut Grove (Miami), Florida with their three children. Dr. Schwade holds an A.B. (Cum Laude) from Washington University in St. Louis (1969), and an M.D. from The Medical College of Wisconsin (1973), and did his Internship and Residency (Therapeutic Radiology) at the University of California, San Francisco

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Mr. **KNOLLENBERG.** Well, I thank you, for two reasons; one, for your testimony, and secondly, for your patience, because for many of you, yourself included, you had to wait until the last minute.

The audience slims down a little bit in the process as well, but I particularly want to applaud all of those who testified, and you, too, Mr. Smith, for your patience in hanging tight. So we will accept everything that you have provided; it will be included in the record, and my belief is, if I am not mistaken, that we have come to the conclusion of this hearing.

And we now adjourn until 10 o'clock in the morning on Tuesday, March the 5th. So we adjourned.

Thank you very much.

[The following statement was submitted for inclusion in the record:]

Testimony by
Congressman Dan Schaefer
to the
House Appropriations Committee,
Subcommittee on Energy and Water

February 29, 1996

Mr. Chairman. Thank you for this opportunity to present my views on the fiscal year 1997 renewable energy budget. I appreciate the important work your committee is doing in this area.

For years, I have struggled for the passage of a balanced budget amendment to our constitution. The reason is simple: I do not want to saddle our children and grandchildren with our accumulated debt. We must leave them a sound budget and a thriving economy.

By the same token, I have also fought for adequate funding for the research and development of renewable energy technologies. Again, the reason is simple: I do not want our children and grandchildren to be unprepared for the day when fossil fuels begin to dwindle in supply and skyrocket in price. Such a day is inevitable; despite today's low prices and seemingly abundant supply, we must develop new energy technologies which will take this country through the 21st century and into the 22nd century---and beyond. Renewables offer the promise of such sustainable energy and have the added bonus of being environmentally sound.

Energy's Impact on the Economy

With energy consuming about one-third of our gross national product, the policies we enact in Congress obviously have an enormous impact on our national economy. In fact, that is why the Commerce Committee's Energy and Power Subcommittee, which I chair, is taking on the issue of utility restructuring this year. We must have a good understanding of how restructuring will affect all aspects of our economy, from the rates consumers will pay to the ways in which utilities and renewables will be affected. My subcommittee has already had a number of hearings on electricity restructuring and we plan to have several more during this session of Congress. We have heard testimony from various representatives of the renewable energy industry during these hearings.

Competitiveness of Renewables

One thing has become apparent as I investigate renewable energy through my work in Congress and especially through the Energy and Power Subcommittee: renewables are becoming an increasingly competitive source of energy. Some forms of renewable energy, such as geothermal, hydro, wind and biomass, are approaching the prices of coal and natural gas, while in some instances, renewables are actually less expensive than conventional energy sources.

Solar photovoltaics (PV) are becoming increasingly competitive, as well. Costs for producing power with PV have fallen by 90 percent since 1976 with improved technology and manufacturing economies of mass production. The photovoltaics market has grown 20 to 25 percent each year for the past 15 years, while prices have dropped by nine percent annually.

A recent projection by Strategies Unlimited, a California consulting firm, predicts that "...For future utility customers interested only in the cheapest energy price, regardless of environmental consequences, PV will be fully competitive with conventional energy between 2009 and 2020." Clearly, solar and all other forms of renewable energy have a promising near-term future in the competitive energy market.

Public Support

A public opinion poll on energy was recently conducted by Vincent Breglio, pollster for Presidents Reagan and Bush, and released in January of this year. Its results show that Americans want a new emphasis placed on developing renewable energy sources---more than any other form of energy listed in the survey. Furthermore, a large majority (59 percent) said that a congressional candidate's position on energy funding policy was an important enough priority to make the voter much more or somewhat more likely to vote for that candidate. Clearly, the public supports renewable energy and, if the opportunity is presented, will take it into consideration when forming voting decisions.

Congressional Support

Renewables enjoy a strong base of support in Congress. For example, during last year's consideration of H.R. 1905, the FY 1996 Energy and Water Appropriations Act, the House adopted the Klug-Schaefer amendment earmarking an additional $44.8 million for solar and renewable energy programs. Subsequently, the Senate, in its bill, passed an even larger appropriation for renewables programs.

During House consideration of the Klug-Schaefer amendment, I found that many of my colleagues had unclear or even incorrect knowledge about renewable energy. That is why I decided late last year to form the House Renewable Energy Caucus, whose members aim to increase awareness of the various forms of renewable energy in the United States. I was initially joined by six other Members of Congress in forming this bipartisan caucus. The group has now grown to nearly 30, with new Members joining almost every day. I am pleased to note that some Members who voted against the Klug-Schaefer amendment last year have joined the House

Renewable Energy Caucus.

National and Home-state Impact

All states have a stake in the growth of renewable energy technologies. Nationally, over 45,000 jobs in FY 1995 were directly or indirectly related to energy efficiency and renewable energy programs, according to DOE figures. These programs create jobs in a high-growth industry, boost our country's exports and, in doing so, help decrease our trade deficit and reliance on foreign sources of energy. They help keep this country a world leader in this crucial ---and rapidly growing--- field of technology.

The catalyst behind this growth is the groundbreaking research and development work taking place at the National Renewable Energy Laboratory (NREL). Located in Golden, Colorado, NREL is the nation's premier research and technology institution in the area of renewable energy. Its laboratory houses the largest collection of renewable energy scientific and engineering expertise and testing facilities in the world. Its scientists are leading the way toward inexhaustible, clean, secure and competitive new sources of energy.

Not only does NREL lead the way in renewable energy research, but its partnerships with private-sector partners provide a crucial link with business and industry. Both NREL and its private-sector partners benefit from these Cooperative Research and Development Agreements (CRADAs), of which 45 have been formed with companies around the nation. For example, John Coors, the Chief Executive Officer of Golden Photon, one of NREL's partner companies, has said:

> "The photovoltaic technology which we have acquired and upon which we are basing our commercialization project was developed over many years in close partnership with DOE/NREL. I believe that this joint DOE/NREL program with subcontractors in fundamental and applied research and development is a very successful model and should be funded as a high priority."

Earlier this year, NREL recently won the Martin Luther King, Jr. Business Social Responsibility Award for support of minority and women-owned small businesses. Of the $124 million in goods and services procured by NREL in 1995, 56 percent were awarded to small businesses, with 22 percent going to minority or women-owned businesses.

Looking Into the Future

Clearly, we must gradually reduce our dependence on fossil fuels as we face the long-term prospect of running out of these resources. If we continue our research and development now, the cost and inconvenience to us and to our descendants will be much less than if we force future generations to embark on "crash programs" to research and develop energy sources which we failed to fund in the 1990s. Thus, I respectfully urge this committee to fund programs in renewable energy research and development to the fullest extent possible.

Thank you for this opportunity to share my views with you, Mr. Chairman. I appreciate your hard work on this matter and I look forward to working with you as we move ahead in Congress this year.

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